McGRAW-HILL SERIES IN EDUCATION HAROLD BENJAMIN, CONSULTING EDITOR

The Integrated

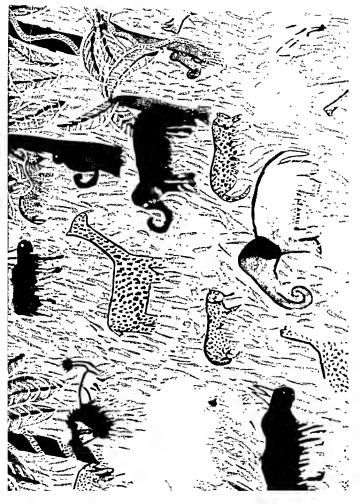
SCHOOL ART PROGRAM

Frontispiece SINCE THE MODERN CURRICULUM IS MADE UP OF EXPERIENCES THAT

ARE VITAL AND REAL TO THE CHILD, ART IN THE SCHOOL SHOULD AF-

FORD A LOGICAL CULMINATION FOR THESE EXPERIENCES. The Jungle, Illustration in Opaque Water Color, by a Group of Children of the Fourth Grade, Elementary

School No. 225, Baltimore, Maruland.



The Integrated

SCHOOL ART PROGRAM

BY

Leon Loyal Winslow

Director of Art, Baltimore Department of Education

SECOND EDITION

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Preface

HE reasons for the appearance of this book are the present revival of art interest in America and the urgent need for art education that will be sufficiently pragmatic to meet the requirements of an advancing culture, one in which the conservation of human resources must play an increasingly important role. The aim of the book is to present a picture that, fortunately, is neither philosophical nor theoretical, for its preparation has been to neonsiderable extent a cooperative enterprise; its content has been the eumulative outgrowth of professional experiences in which n large number of individuals, both teachers and students, have had a share.

The contents of this book are based on neither the traditional nor the radienl point of view in education but seek, rather, to advocate and to exemplify a balanced offering, one in which information experience and activity experience are equitably related. The book should therefore meet the requirements of a text in art education for use in the preparation of teachers in normal schools, art schools, and teachers colleges. It should also serve as a reference book for teachers in service—not only for teachers of art but for other teachers as well, integrated art being but a single aspect of the entire school experience of elementary and secondary school boys and girls. The purpose of the book, then, is not so much to furnish subject matter for the curriculum as to indicate how subject matter is to be made use of in learning—to provide a point of view in art education and a founda-

tion in the techniques employed in carrying on units of teaching in art that bear a definite and positive relationship to the curriculum as a whole.

The author desires to acknowledge special indebtedness to Dr. Joseph L. Wheeler, formerly Director of the Enoch Pratt Library of Baltimore, for the annotated bibliographies at the ends of the chapters and in the chapter, Books on the Arts; to Ivan Rigby, Teacher of Design, Pratt Institute, Brooklyn, for material relating to "The New Art" included in the chapter, The Senior High Schools; and to Walter R. Gale, Instructor in Art, Baltimore City College; George E. Griefzu, Instructor in Art, Thomas A. Edison Vocational High School: Gretta Smith, Head of the Fine Arts Department of the Enoch Pratt Free Library; and Mrs. Blanche R. Bellamy, Manager, Munsell Color Company, Inc.; all of Baltimore, Maryland; also to John E. DeMeyer, Executive Secretary, The Related Arts Service, and to Dr. H. H. Linn, Associate Professor of Education and Superintendent of Buildings and Grounds, Teachers College, Columbia University, both of New York; and to the following persons for furnishing copy for the illustrations: Belle Boas, Baltimore; Theodore M. Dillaway, Philadelphia; Dr. Royal B. Farnum, Providence; May Gearhart, Los Angeles; the late Harry W. Jacobs, Buffalo; Winifred K. Kaley, Scarsdale, N.Y.; Mrs. Zara B. Kimmey, Albany, N.Y.; the late Joseph Marchetti, Aliquippa, Pa.; Edith L. Nichols, New York; Russell C. Parr, Washington, D.C.; Hobson Pittman, Overbrook, Pa.; Clara P. Reynolds, Seattle; the late Augustus F. Rose, Providence; and the late Elmer A. Stephan, Pittsburgh.

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LEON LOYAL WINSLOW

Baltimore, Mo. May, 1949

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Editor's Introduction

in the art education of teachers. The length of the decade cannot be measured merely in years, but must also be measured in the impact of the momentous events which those years have brought. At the end of this period, it is more apparent than ever before that the communities of men must be greatly strengthened if men are to survive, and that the spirits of men must put growing reliance on those activities which nourish the spirit.

In these circumstances, the kind of nrt which this book discusses is increasingly indispensable. As one of the crucial elements in the life of any community—local, national, or world-wide—a community-serving, community-expressing, and community-symbolizing art needs now as always to be clearly understood and to be put into netion with courage and imagination.

This revised edition is presented to the profession in the belief that it will be an even more valuable instrument for this purpose than was its predecessor.

HAROLD BENJAMIN

University of Maryland May, 1919

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Chapter I

Art in a Changing World

NLY recently have we come to the full realization that the time has arrived for taking stock of our mental and emotional assets, with a view to consistent planning for the future. "From the social point of view, as contrasted with art for art's sake," observe Keppel and Duffus, "the problem of art, like that of religion and recreation, turns today on its service to man in his inner adjustment to an environment which shifts and clanges with unexampled rapidity. It appears to be one of the three great forces which stand between maladjusted man and his breakdown. Each serves in its own way to bring him comfort, serenity and joy."

In the entire history of the human race there has probably never been a time when there existed a more urgent need for balance in human relations than obtains at present. Certainly, we have all had more or less forcibly impressed on our minds and souls in the past few years the decided lack of effectiveness in living on the part of the individuals about us, n condition that has inevitably resulted in mental and emotional insecurity. We have observed the disintegration of family control, accompanied by a diminution in the restraining

¹ Keppel, F. P., and R. L. Duffus, The Arts in American Life, McGraw-Hall Book Company, Inc., New York, 1933.

forces formerly exerted by religion; we have seen a youth problem developing, the magnitude of which has challenged the resources of the schools as never before in the entire history of education.

In planning for the future, art education should obviously be regarded as one means of securing mental and emotional balance in living, and the approach to art should be from the standpoint of the individual, as well as from that of the social group. The art experiences engaged in in the schools should not only help the individual to be a greater source of material as well as spiritual satisfaction to himself, but it should also help to make him a better citizen in the community environment in which he lives.

DEMOCRACY IN ART EDUCATION

"At times the schools have thought," says Haggerty, "that they should make children, at least some children, artists in the creative sense. They have tried to teach them to make with their own hands heautiful things that could be placed in a school exhibit. For the most part the effort has gone awry. In the first place, the schools can scarcely afford an amount of time adequate for the making of a competent artist. Secondly, only a few pupils could participate in a genuinely ereative program which would thus leave all other pupils untouched. Thirdly, the attempt at a productive program for the few tends to set art apart as an interest that most persons can neglect and ereates of its devotees a kind of separatist cult. This effort at a ereative program too often envisages art in a very restricted way, entirely out of keeping with our assumption, and it would limit school instruction to a narrow field of activities.

¹ Haggerty, M. E., Art a Way of Life, pp. 39 and 43. The University of Minnesota Press, Minnesota, 1935.

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"Art as the province of a sophisticated few lies outside the pattern of our thinking here. Art as a cult may be a hindrance rather than an aid to art as a way of life, and it clearly seems to be so in many cases. The teacher's art must be that of the broad and crowded avenues of life, the home, the factory, and the market place. It is this conception that must be clarified and dramatized in concrete ways, if art is to take its place in the schools as a major and vital instrument of cultural education."

DESIGN AND LIVING

Realizing that neither extreme change nor extreme stability can be expected to furnish a solution of the problem, we have at last come to recognize in the existing unbalance a challenge to our efforts at planning; to realize that in order to seeme an adequate solution, reason will need to be tempered with tradition, and fancy with the restraining force of reality. The principles of design, so familiar to teachers of art, will indeed have to be applied to the fiaest of all arts, which is the art of living.

Since art is synthetic, its influence on the new social order will be constructive. In the present situation, design may well be considered as a mental conception of what will need to be done to secure balanced living. The design principle of balance will need to be applied to everyday problems; problems of selection, of mrangement, of maintenance, of understanding and of appreciation, of expression and of creation. "What must of us lack in order to be artists," says Dewey,! "is not the inceptive emotion, nor yet merely technical skill in excention. It is capacity to work a vague idea and cuntion over into terms of some definite medium."

Dewey, John, Art as Esperience, Minton, Balch & Co., New York, 1951.

ART AS A SCHOOL STUDY

"If the fullest measure of benefit is to be realized from the teaching of art, it is at once evident," as pointed out by Klar, "that we shall have to conceive of art education not merely as an obligation of the entire curriculum, but as a major objective of a school study as well. From the standpoint of school administration, art as a school study may be regarded as exactly coordinate with the other subjects; from the standpoints of content and of psychological method, however, art is somewhat though not radically different from the other subjects. It is concerned quite largely with the concrete expression of individual thoughts and feelings to the end that life itself shall be tricher and more meaningful for all."

From the beginning to the end of the school course, the art period should be one of continuous self-expression and of consistent self-realization, of aspiration and of dreams, of experiment with a diversity of materials and of experience with beautiful things, of recreation and of productive work done in the spirit of play, of freedom of thought and of opinion, of mental and of spiritual growth.

Klar, W. H., C. V. Kirby, and L. L. Winslow. Art Education in Principle and Practice, pp. 10-11, Milton Bradley Company, Springfield, Mass, 1933.

> FROM THE BEGINNING TO THE END OF THE SCHOOL COURSE THE ART PERIOD SHOULD BE ONE OF CONTINU-OUS SELF-EXPRESSION AND OF CONSISTENT SELF-REALIZA-TION. Children of Second Grade Engaged in Activities of the American Indians, Montlair, New Jersey.



TRANSFORMING EMOTION INTO EXPRESSION

According to Dewey,1 "An irritated person is moved to do something. He cannot suppress his irritation by any direct act of will; at most he can only drive it by this attempt into a subterranean channel where it will work the more insidiously and destructively. He must act to get rid of it. But he can act in different ways, one direct, the other indirect, in manifestations of his state. He cannot suppress it any more than he can destroy the action of electricity by a fiat of will. But he can harness one or the other to the accomplishment of new ends that will do away with the destructive force of the natural agency. The irritable person does not have to take it out on neighbors or members of his family to get relief. He may remember that a certain amount of regulated physical activity is good medicine. He sets to work tidving his room, straightening pictures that are askew, sorting papers, clearing out drawers, putting things in order generally. He uses his emotion, switching it into indirect channels prepared by prior occupations and interests. But since there is something in the utilization of these channels that is emotionally akin to the means by which his irritation would find direct discharge, as he puts objects in order his emotion is ordered.

"This transformation is of the very essence of the change that takes place in any and every natural or original emotional impulsion when it takes the indirect road of expression instead of the direct road of discharge. Irritation may be let go like an arrow directed at a target and produce some change in the outer world. But having an outer effect is something very different from ordered use of objective conditions in order to give objective fulfillment to the emotion. The

Dewey, John, Art as Experience, pp. 77-78, Minton, Balch & Co., New York, 1934.

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latter alone is expression and the emotion that attaches itself to, or is interpenetrated by, the resulting object is esthetic. If the person in question puts his room to rights as a matter of routine he is anesthetic. But if his original emotion of impatient irritation has been ordered and tranquillized by what he has done, the orderly room reflects back to him the change that has taken place in himself. He feels not that he has accomplished a needed chore, but has done something emotionally fulfilling. His emotion as thus 'objectified' is esthetic."

Taste is possible only because people differ in their opinions about what is fitting or artistic, and it is through the exercise of one's sense of discrimination that taste improves and grows. People constantly, though often unconsciously, display their taste not only in the things they ereate and in the selection of the products that they buy and in the arrangement of these things on the person nr in the home, but also in the artistic care that they take of themselves and of their possessions, in maintaining themselves and their possessions artistically. Improvement in the taste of the masses can accumplish nothing short of improvement all along the line: improvement in communities, in public buildings, in our homes, and in nurselves, general improvement in living with the resulting higher standards implied.

THE ARTIST AND INDUSTRY

Geddes¹ points out that "We are entering an era which notably shall be characterized by design in four specific phases: Design in social structure to insure the organization of people, work, wealth, leisure. Design in all objects of daily use that shall make them eco-

¹ Geddes, N. B., Horizons, abstract of Chap. I, pp. 5-23, Little, Brown & Company, Boston, 1932.

nomical, durable, convenient, congenial to everyone. Design in the arts, painting, sculpture, music, literature and architecture that shall inspire the new era.

"The impetus towards design in industrial life today must be considered from three viewpoints; the consumer's, the manufacturer's and the artist's. The consumer has seen and read advertisements and has turned trustingly to industry. But industry, with some conspicuous exceptions, has failed him. It has forced consumers to huy below their taste. Sales organizations have educated the masses to accept the mediocre as criterion, offering at a reasonable price, not genuine creations, but spurious substitutes of a mongrel-limitation-period type.

"Yesterday's merchandising psychology was to follow in the wake of popular demand and to supply it. Tomorrow's merchandising policy must necessarily be to anticipate public demand and supply it. Since public demand now is for quality in appearance as well as for quality in service, artists and industry will still further unite their efforts to win the confidence of the public.

"We are too much inclined to believe, because things have long been done a certain way, that that is the best way to do them. Following old grooves of thought is one method of playing safe. But it deprives one of initiative and takes too long. It sacrifices the value of the element of surprise. At times, the only thing to do is to cut loose and do the unexpected. It takes more than imagination to be progressive. It takes vision and courage."

"If one engenders a love of beauty," states a recent manifesto of the Progressive Education Association, "he is indirectly creating deep and abiding spiritual values and building character. If he develops good taste, he is also developing personality, social values,

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citizenship and character. If he enriches life and trains for leisure, again he is building social values, wholesome lives and mental attitudes, social consciousness, character and spirituality. If he develops the desire to create, the same is true and in addition he has provided the individual with a rich and constructive experience and nn opportunity for a satisfying emotional expression which may well spell the difference between a balanced and unbalanced life, between normality and success or futility and failure."

ART EDUCATION FOR LIBERAL ENDS

Whitford2 calls attention to the fact that "nrt education, properly presented, awakens the child's sense of observation so that he possesses a seeing eye and an understanding mind. The act of sceing involves the processes of thought, of memory, and of judgment. For example, if a pupil is trained in the ability to see grace and refinement of line in plants, and is taught to adapt such lines to the designing of furniture, he will be more observant and appreciative of fine lines in nature and furniture. If n pupil is given the ability to see and analyze beautiful color harmonics in the plumage of birds, in plants. and all nature, and is taught to produce similar harmonies in rugs and textiles, he will observe and appreciate more keenly the beauties of color in nature, and in rugs and textiles. Similar analogies may be made for nll practical problems in nrt. Such knowledge equips the pupil with initiative in the use of art elements and their arrangement as adapted to dress, home furnishings, and problems of design and construction wherever they may be encountered."

¹ Committee of the Progressive Education Association on Social and Economic Problems, A Call to the Teachers of the Nation, Hernal & Hitchcork, Inc., New York, 1933.

A Call to the Trackers of the assuring to Art Education, D. Appleton-Century Company, Inc., 1 Whitford, W. G., An Introduction to Art Education, D. Appleton-Century Company, Inc., 1 New York, 1986.

He who understands about art and who uses this knowledge gets a great deal more out of life than does the person who has not such a background. Things mean vastly more to him and he is able to derive from them an ever-increasing amount of knowledge and delight. For bim even the objects of daily use come to assume a richer meaning, while clothing, household furniture and equipment and common tools take on an added interest. Machinery, automobiles, the radio, the cinema, books and other publications, as well as buildings, statues, paintings, even literature and music, assume an expanding claim on his growing understanding. Art supplies in his life so many satisfying intellectual and emotional experiences that otherwise would not be possible, that its presence there would appear to be essential.

ART EDUCATION FOR SPECIAL ENDS

In his report on "Human Resources," Watson' states that "among the crowning achievements of a civilization are the triumphs of its scientists, organizers, artists, musicians, physicians, teachers, writers and others with exceptional genius. "Talent' should not be limited to academic or artistic abilities, but should include all great social contributions. Productive genius in any field is dependent upon both native capacity and adequate opportunity for the development of these gifts. No comprebensive effort has thus far been made to discover among the children and young people of this country those equipped with unusual promise. Only a few attempts have been made to set up special classes appropriate to the most talented.

"The program should include: (a) An appraisal of tests, ratings, early nchievement records and other bases for predicting unusual

¹ Watson, Goodwin, "Human Resources," Report of the National Resources Committee, The Educational Record, Vol. 17, No. 1, January, 1936, pp. 3-94, The American Council on Education, Washington, D. C., 1936.

aptitude; encouragement of research on new techniques. (b) A review of methods now in use for developing and training each type of superior ability. (c) A study of handicaps and obstacles which now prevent the realization of full possibilities of superior talent, with n view to the kind of social planning which will remove these hindrances to development. (d) A follow-up study of persons with exceptional aptitude and training to discover any measures which might insure the better integration of special talents in the activities of society.

"In addition to those who can expect to center their vocation in the exercise of their gifts, it should prove possible for many innre to enlarge personal satisfactions and to give a high type of service to society in avocational activities. The program for the superinr children should, so far as possible, function as n part of the general provision for better adjustment to individual differences, increased opportunity for schooling, and the more approprinte vocational guidance of ynuth and adults. It might be a social injury to institute any program which seemed to serve only n special group, however enrefully selected.

"Attention should constantly be given to the effects of invariable environmental stimulation, from earliest years on through adult life, in producing superior performance on the part of persons who may have shown little promise beyond the ordinary."

Art certainly furnishes a much-needed outlet for individual expression and self-realization on the part of people in general. Particularly in these days of economic stress and strain it is providing an ever more popular means of valuable recreation for those who have learned to know its possibilities in this direction. For the amateur, practice of an art activity often leads not only to personal satisfactions but sometimes to art skills undreamed of by those who chose first to pursue it as a hobby.

HARMONIZING MATERIALS AND PROCESSES

"Today," according to Cheney,1 "we see handicraft as having flourished immemorially, developing its own forms and ornamentation under laws determined largely by its materials and tools and the hand's typical manipulation of them. And it will continue to flourish (though decreasingly as a popular market commodity) by reason of honest adherence to those fundamentals. But we see also by contrast how machine production depends for its integrity and distinction upon the artist's acceptance of the machine as a tool, and upon a greatly widened range of materials particularly adapted to mechanical manipulation and duplication. A certain honesty of approach and a devotion to functional expression are common to both handicraftsman and worker for the machine. The attempt to transfer ornamental idioms and toolmarks from the one field to the other is what led to a century of mistaken effort. It is fundamental that each type of art work must be true to its materials and its processes; and that the ornament and style marks which appear as the type is matured and refined cannot legitimately be imitated clsewhere, under other conditioning processes and circumstances,"

"For persons above the level of mere existence," writes Haggerty, "the arts of life are probably more pervasively important than anything the schools now teach except the mere rudiments of learning.

Haggerty, M. E., Art a B'ay of Life, The University of Minnesota Press, Minneapolis, 1935.

ART CANNOT BE APPLIED; IT IS INHERENT IN THE VERY CONSTRUCTION OF AN OBJECT. Making a Clay Bowl. Public School No. 54, Manhatlan, New York City.

¹ Cheney, Sheldon, and M. C. Cheney, Art and the Machine, pp. 41-42, Whittlesey House, McGraw-Hill Book Company, Inc., New York, 1936.

THE ARTS AND SURVIVAL

"From studies of the evolution of animal and cellular life," writes Guggenheimer," "we learn that cooperation is the ultimate necessity for survival of higher forms. Many animals are shown from experiment to grow faster in moderately crowded conditions than in relative or complete isolation. Hence we conclude that systematically cooperative aggregations are most highly productive. The energies of the best types serve to rouse those of less élan to a quickened effort. So awakened are we to the desperate need for the best spirits in our world society to spread the light of their vision as swiftly and as persuasively over the wide masses of their less awakened, less enlightened brothers as possible, that we are beginning to lose patience with forms of art and science which do not draw their inspiration at least partially from a recognition of this need. Of course, we know that the motivations of the best minds in any age correspond to and spring out of the special conditions pertaining to that age; and it is understandable therefore to find today's most sensitive human beings consumed with a primary passion to do something about the appalling infirmity of spirit and mind that characterizes a world submerged in disaster originating out of that infirmity. It is due to the sad depletion of moral fiber in a society sinking deeper and deeper into the grip of a materialistic civilization that we find ourselves confronted with a prospect of catastrophe if we do not bend every effort to avert it. We can no longer consider our arts as anything less than essential aids in the emergent struggle for worth-while survival. Just as in the actual emergency of war the most diverse talents all turn their energies toward successful prosecution of the battle, so in the anguishing conditions of

¹ Guggenheimer, Richard, Sight and Insight, pp. 198-199, Harper & Brothers, New York, 1945.

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a seemingly tottering civilization must every highest effort go into the final hope, the quiekening of the general human will power toward grace and away from bestiality. No minor efforts of little fanciers in the fine arts are going to seem of much consequence in times like these. An artist with a manly conscience today feels impelled to stretch the sinew of his hungering intuition to the breaking point, or else to sacrifice the aesthetic momentarily in favor of the moral. We seem, indeed, to have reached a point in our materialistic era where the ultimate values seem overrefined and too rarified to the great majority of people. The great truths and the beauty of the great truths must be brought within the horizons and the reach of multitudes, not of aesthetes and scholars."

BALANCE IN EDUCATION

"The golden mean in education," says Stoops, 1 "is an harmonious median between two undesirable extremes. So important is the golden mean that it must become the law of balance and harmony. The law of the golden mean requires that there be balance and harmony between personnel and capital ontlay. The most desirable class size depends upon the personality of the teacher, the type of students, and the materials to be learned, but there is a point at which every class functions best. Control by the administration and control by the students are both wrong. To apply the law of the golden mean, there must be a cooperative reciprocity, a conscious striving towards common ends. Some schools are all but insulated from community interests; others become political footballs. The school should participate in community affairs to the extent that it wins public favor for itself and serves the community.

¹Stoops, Emery, "The Golden Mean in Education," The Phi Delia Kappan, Vol. 19, No. 1, October-November, 1936, pp. 45-44 (abstract).

"Balance and sanity demand continuous social evolution rather than stagnation or revolution. Predominantly cultural or predominantly vocational instruction results in a lopsided conception of experience—the principle of the golden mean in education strikes a balance between the two, varying from individual to individual. To follow the golden mean in education, teachers should develop individual capacity to the maximum in the direction that it will most benefit society.

"Out of our experience in wobbling first towards dictatorship and then towards anarchy will come a better conception of democracy in the classroom. To stress facts and ignore their use, or to stress thinking with nothing as a basis for thinking are equally undesirable methods in the classroom. The golden mean necessitates balance and harmony between the two extremes."

NEED FOR A CONSTRUCTIVE PROGRAM

The present urgent need is for a program of art education which shall provide for the needs of all the children of all the people, including those with little or no special aptitude in art as well as the most gifted. Obviously, such a program cannot afford to be one-sided, but must provide experiences of various kinds. It must furnish a rich offering of subject matter and of experience, in which a balance between information and activity has been carefully observed. Just enough technical information should be introduced to balance the general information, and there should be an equitable amount of directed activity in relation to the creative activity included in the teaching unit. No program for art education, short of a balanced one, can be expected to accomplish all this.

ART IN A CHANGING WORLD

QUESTIONS FOR DISCUSSION

- 1. Why should the need for balance in human relations be more urgent at the present time than it was a generation ago? How do Haggerty's ideas on school art align themselves with those on the balanced art education program, expressed in the present chapter?
- What can the study of art in the schools do to improve social conditions in a community? Do you think the carrying on of such a study practicable in the school curriculum? Discuss.
- 3. What makes taste possible and how can one's taste be improved through educational processes? Explain how, according to Dewey, an emotion may be transformed into aesthetic expression. Give an example of such transformation, drawing on your own past experiences.
- 4. How can one who understands art get more out of life than the person without such a background? Why does Geddes believe that artists and inhistry will further unite their efforts to win the confidence of the public? Does your experience bear out what he says about the taste of the consumer?
- 5. Give an example of each of the following aesthetic problems of everylay living: selection, appreciation, maintenance. Does the art program in the school system with which you are most lamiliar attain the objectives set up by Whitford? If not, what changes in the system would, in your opinion, be desirable?
- 6. When should art in the school furnish an outlet for expression with materials? How would you justify Cheney's statement that it is fundamental that each type of art product must be true to its materials and its processes?
- 7. What can an art teacher do to stimulate on the part of pupils a worth-while use of their leisure time? How does Watson suggest providing for the needs of talented children? To what extent should this provision be in the direction of vocational education? General culture? Do you agree with Tomlinson that art cannot be applied? Elaborate.
- 8. In what ways can art as a school subject help the child to adjust himself to his environment? Explain the theory of the golden mean in education as presented by Stoops. What effect should an application of this theory to concrete schoolroom situations have on the teaching of art?

REFERENCES

HUMAN RESOURCES: a report submitted to the National Resources Committee by the American Council on Education, by Goodwin Watson, Educational Record, Vol. 17, 1936, pp. 3-94.

Human resources, which are more valuable than all other assets of this nation, are now frequently wasted, underdeveloped or misused. As planning is necessary for the development of buman resources, and in both cases it involves and depends upon social planning. A plan is recommended to develop more fully and to enrich the lives of childrenvouth, and adults.

ART A WAY OF LIFE

M. E. HAGGERTY

The University of Minnesota Press, Minneapolis, 1935

Believing that enrichment of life results through improvement in the visual aspects of the things one lives with, this booklet urges art instruction in schools to include the study of the home—its interior decoration and outward appearance.

ART AND THE MACHINE

SHELDON and MARTHA CHENEY

Whittlesey House, McGraw-Hill Book Company, Inc., New York, 1936

An admirable survey of industrial design in twentieth-century America, showing the emergence of modern design as a union of two streams of influence—American engineering and abstract art.

ART AS EXPERIENCE

JOHN DEWEY

G. P. Putnam's Sons, New York, 1934

A treatise on the philosophy of art. An attempt "to restore continuity between the refined and intensified forms of experience that are the works of art and the everyday events, doings, and sufferings that are universally recognized to constitute experience."

THE ARTS IN AMERICAN LIFE F. P. KEPPEL and R. L. Duffus

McGraw-Hill Book Company, Inc., New York, 1935

Chapters on the effects of the arts upon American life. In addition to the usual subjects—architecture, painting, sculpture, and music, there are discussions on

ART IN A CHANGING WORLD

art education in the schools and outside the schools; advertising; art in daily life; commercial design; theater and cinema; and government art.

CRAFTS FOR CHILDREN

R. R. TOMLINSON

The Studio Publications, Inc., New York, 1935

Half of the 129 pages are taken up by the excellent illustrations. The author believes that craftwork develops initiative and creative power, also that primitive art bears a close relation to his subject, and traces the history of decorative art for 30,000 years, finding much in primitive drawings that can be compared with the first efforts of the children of today. He follows this up with a survey of crafts teaching in the principal European countries and in America.

SIGHT AND INSIGHT

RICHARD GUGGENBEIMER

Harper & Brothers, New York, 1945

A prediction of new perceptions in art, this book should help to orient the student to art in a changing world. The text treats of the communicative functions of art, form in art, the interfusion of substance and space, continuity, creativity, sensitivity, hypernesthesia, nuance, spontaneity, self and nonself, originality and fabrication, the familiarity complex, the fallacy of esoteric art, the commouplace, and immediacy and beauty. The book concludes that "art will play a mighty and prophetic role in the coming restoration of man's faith in himself and thus in the brotherhood of man, and in the intrinsic virtue of the human soul."

ART IN THE INTEGRATED PROGRAM

M. F. S. GLACE

Published by the author, 1931

Shows in a series of units of study the function art serves in the integrated curriculum of the fourth, fifth, and sixth grades.

HORIZONS

NORMAN BEL GEDDEN

Little, Brown & Company, Boston, 1932

A distinguished designer for the theater has turned his genius to "literally redesign the physical aspects of a whole civilization." Mr. Geddes's designs for radios, gas ranges, and scales have won immediate acceptance because of their perfect fitness for their uses. In this book are presented his plans and theories for redesigning houses, theaters, restaurants, and all vehicles of transport—automobiles, trains, airplanes, and ships.

Art in School and Life

educative and self-controlled experience directed toward the meeting of personal, national, and world needs, for art, even more perhaps than most other curriculum arcas, contributes to democratic living and understanding. The purpose of art in the school curriculum is therefore vastly more than that of an area embracing materials and processes; it involves not only activities but information as well, and feelings. Art should occupy in the school a place commensurate with that which it occupies in everyday life, provision for which should he made in the elementary school, the secondary school, the art school, and the college.

GENERAL EDUCATION

An increased emphasis will have to be placed on art as a curriculum area at the elementary school level, and time should be found for it in the weekly and daily schedules. Classroom facilities, equipment, and supplies, as well as instruction, should be adequate to carry on an efficient program. Adequate professional training in elementary school art must be provided by the teachers colleges. All prospective general elementary school teachers should be required to complete at least two three-hour courses in art education as a part of their professional background.

ART IN SCHOOL AND LIFE

Students of the junior and senior high schools having unusual ability and promise in art should be encouraged by their teachers, counselors, and school principals to enroll for an art curriculum, not to be confused with the other school curriculums in which art may also be offered as a major subject. It is not intended that the art curriculum replace these courses, the purpose of which is to offer inuncdiate vocational training or to enrich the general secondary school offering. The art curriculum is kept coordinate with the other general curriculums offered in the secondary schools. It should not attempt to compete in any way with the special art school or college, but it should aim rather to meet the general educational needs of those whose interests lie predominantly within the art field.

Art education at all grade levels should enable the individual to adjust himself more effectively to his environment, should function in his life and character as an integrating power, enriching his living, and should help to motivate his interests and clarify and organize his thinking. General education must afford experiences that will enable him to grow in his awareness of art, and to become skilled in his ability to use the principles of design in controlling his environment and himself to the end that he may eventually become a desirable adult citizen.

ART-MAJOR COURSES

The secondary school art-major course is planned for those students who, having some ability and a great deal of interest in art, elect it as a subject in high school for two years with the intention of discontinuing their formal education in favor of a job on graduating from high school or of pursuing a liberal-arts curriculum in college. The purposes of the art-major course include exploration of the pos-

sibilities of art as an immediate means of earning a livelihood, the pursuit of an additional cultural subject in high schools, and improvement of everyday living standards through learning ahout how art contributes to daily living in the home and the community.

The time allotted to the usually elective art-major course is one period in school and one period of homework for each school day. The courses suggested for eleventh-grade students include "Art of the Ages," "Costume Design and Illustration," "Industrial Design," and "Freehand Drawing"; for twelfth-grade students "American Art," "Stagecraft," "Interior Decoration," and "Modeling and Carving," It is desirable that some of these courses should be made constant subjects for certain established curriculums—commercial, industrial, or academic, for example.

THE ART CURRICULUM

The art curriculum is planned exclusively for boys and girls capable of becoming high school graduates and of entering college or art school to specialize in art or art education. Students with interest and exceptional promise in art who desire to make an art profession their lifework are encouraged by their teachers, counselors, and school principals to enter this four-year high school curriculum. They should be admitted to it on the recommendation of the art teachers and the school principal, should be of normal intelligence or above, and should be good students scholastically. This curriculum is now in operation

BALANCE IN COLOR MEANS EQUALIZING COLOR ATTRAC-TIONS, The Gue Club, Opaque Water Color Painting, by Laverne Cunningham. Age Fourteen, Ninth Grade, Guynns Falls Park Junior High School, Ballimore, Maryland.



ART IN SCHOOL AND LIFE

in the public schools of Baltimore, being offered jointly by four secondary schools, one junior high school, and three senior high schools.

The courses offered in the art curriculum are not intended to be immediately vocational but rather to furnish a sound background for future specialized training on the art-school or college level, where the student will continue to major in his chosen field. The successful art-curriculum graduate is enthusiastically admitted to both college and art school.

HUMAN VALUES

One fundamental purpose of art is to meet worth-while human needs in the best ways possible. In meeting needs, ideas take form first in our minds and then in materials. Ideas as well as materials have to be arranged, and both are often best organized at the same time. One learns by doing. The difference between an art product and one that is not artistic is largely a difference in its design. Genuine art products are carefully thought out or planned, skillfully formed, and appropriately finished, but beyond all this is the value of the work to the artist himself, improvement in his habits and attitudes, and a heightened appreciation of the world about him.

SELF-REALIZATION

Artistic taste is the road that leads to attractive personal appearance, to personality. One who is conversant with the art of personal appearance is at ease in most situations because he has foreseen their art requirements and has planned in advance how to meet them adequately. The desire to make and keep our persons attractive is as old as art itself. From the earliest times people have sought to enhance the beauty of the human body through proper care and decoration. Care of the body suggests cleanliness and healthful maintenance.

while decoration implies suitability of the clothing and accessories worn. Both care and decoration of the hody, if approached from the aesthetic point of view, come within the province of art. Education in art is directed toward the realization of beauty in individual conduct which will result in improved personality, through

Expression: giving visual form to the feelings through the use of

materials.

Imagination: encouraging the use of visual imagination in all creative problems.

Appreciation: sensing and understanding the aesthetic significance of all man-made things; enjoyment or aversion.

Toste: developing of standards for evaluating art work done by children and by others; cultivating art judgment.

Information: surveying art through the ages, to make the individual conscious of his heritage; developing an art background for the present.

Discussion: discussing works of art intelligently, using an adequate vocabulary.

Experience: conceiving art as the culmination of living, the organizer and enricher of life.

Design: exercising sensitivity to the principles of design, and knowing how they function in life situations.

Recreation: engaging in relaxation through the appreciation of works of art and through the use of art materials; relieving emotional tension; engaging in hobbics.

THE ART CURRICULUM IS PLANNED FOR BOYS AND GIRLS CAPABLE OF BECOMING HIGH SCHOOL GRADUATES AND OF ENTERING COLLEGE OR ART SCHOOL.

THE INTEGRATED SCHOOL ART PROGRAM

Individualization: realizing individuality and the integration of personality

BETTER HUMAN RELATIONSHIPS

When one becomes impatient because things do not go his way, he may often improve the situation by putting things in order, by rearranging his books and papers or other things; or he may even resort to creating something. As he enters into the problem of bringing order out of chaos, his disposition will improve. He thus engages in art activity which results in the improvement not only of his surroundings but of himself. Incidentally, the individual who engages in such activities generally helps to make other people happy, too. Human relationships as a topic refer to

Society: getting on with others, which involves cooperation, courtesy, leadership, sharing, helpfulness, morale.

The home: cultivating the desire to have our homes as artistic, beautiful, and efficient as possible.

The masters: learning how to know the masters through their finest works and as members of the social group.

Here and now: studying art as a major field of human culture and its subdivisions: painting, sculpture, architecture, industrial art, commercial art.

International good will: understanding the various contemporary cultures through becoming familiar with particular examples of their art.

ECONOMIC EFFICIENCY

Since ancient times industrial, commercial, and economic conditions have encouraged the concentration of populations in cities. Florence has been referred to as "the city that art huilt," but even Florence was never beautiful as a whole. It remained for still later

generations to meet more adequately the needs of the inhabitants. Although beauty has not always been the avowed aim of our city builders, beauty has often resulted from their planning. The zoning laws of New York City have not only set aside certain districts as residential, industrial, and commercial, but through their careful provisions for light and air have also brought about beautiful new architectural forms. If the city of today may be regarded as the forerunner of the city of tomorrow, we can look forward with confidence to the early arrival of the city beautiful. Economic efficiency applies to

Occupations: producing art; learning about art in industry, as a vocation, the requirements and opportunities for various jobs; learning about art in business and trade.

Guidance: exploring the field of art; learning about the economic values of art for all.

Work habits: establishing effective habits of work; information, technique, skill; exploration of art mediums, tools, machines.

Art interests: eultivating interests in art; intellectual, emotional, economie.

Meeting of needs: using art as a mode of expression; solving everyday problems that require a knowledge of arrangement or design.

Evaluation: buying wisely; unking profitable selections of articles of clothing, furnishings, and other products, based on consideration of design.

CIVIC RESPONSIBILITY

Art in the schools is concerned with how people live and should live in their homes, under what conditions they work and should work in the factory or on the farm, how they buy and sell goods and carry on commerce in stores and markets, and how all such human activities can best be carried on under artistic planning, which is another name for design. If democracy is to prevail in our country, children should be taught to live together democratically in school. It has been well said that "design laws are divine laws." We may all be artists in the way we make use of the principles of design in living, the art of living being indeed the finest of all arts. Art is taught in schools because it contributes so much to the making of better citizens for our democracy, through

Enrichment of life: becoming aware of art needs in the community and of the fine examples already in existence in the community.

Ciric betterment: becoming conscious of good design and the lack of it in the environment; assuming responsibility for these conditions.

Maintenance: caring for things; keeping them clean and in repair: elothing, the home, the community.

The artist who paints a landscape picture or models a figure does not represent nature as it is. Rather, he creates a design which expresses nature as he sees it, as he feels it. Nor does the landscape architect accept nature as he finds it but creates of it a composition of fields, streams, trees, and roadways. A forest may have a refining influence which increases in proportion to the intelligence with which it is observed. In our countryside and in our parks we find nature adapted, more or less successfully, to human needs. How well this adaptation has been realized is a matter of art. Education in art seeks to open the eyes and minds, the "inner eye," of children to the satis-

PHILOSOPHY

An over-all view of art education—something that the superior teacher alone may be said to possess, but which should he pursued and ultimately achieved by all—is urgently needed at this time. If not education is to function fully in the lives of boys and girls, not must be made to permeate most of the activities that they engage in, must help them to set up aestbetic ideals for judging their own work and the work of others. Teachers are thus afforded an opportunity to be of genuine service to their pupils in making available to them the best in art education that the psychology and philosophy of our times make possible.

PSYCHOLOGICAL AND AESTHETIC STANDARDS

What is often necepted as satisfactory art education is not nt all representative of the standards that should govern the earrying on of instruction in this important curriculum area. Obviously nrt's major objectives of appreciation and expression nnd its content of inforuntional material may be considered just as approprinte for nrt as nre the corresponding aims and subject untter for other curriculum areas such as science and social studies. Yet when judged by psychological and aesthetic standards, art in the schools is by no means the effective force that it should be for the adjustment of the individual and the broadening and refining of his relationships to others. The potential significance of art in living is too often sacrificed to the lesser purpose of making the curriculum areas other than art more meaningful to the pupil, while there has been an analogous tendency to neglect the educational values peculiar to art, and to which art is rightly entitled as a major curriculum area.

There are conscientious teachers who plan their lessons in advance, who make use of a good course of study, who conduct class discussions skillfully, who ask thought-provoking questions, and who encourage the free interchange of ideas. They even make legitimate

and sometimes effective use of audio-visual aids and reference books. Yet from the standpoint of modern philosophy, both of art and of education, their devotion and zeal do not appear to be commensurate with the art needs of the times. Their teaching falls short of attaining the broader objectives that should be sought.

FREEDOM OF ART EXPRESSION

Often the actual works turned out by pupils of a particular group working with such a teacher are deceiving to the casual observer and to the general educator inexperienced in the sensitive criticism of such products. It is not always easy to detect in a pupil's "art" work the stultifying influences of set rules for design, color, and representation; of devices, tricks, and copying; and the work of a teacher who prefers to "demonstrate" directly on the pupil's work.

"We shall need to be very careful," Site points out, "to remove any anxieties or fears which our young folks may have in trying to put their thoughts or observations into pietorial form, by telling them that they may have to make many attempts before they produce a picture that really pleases them. We need to assure all of them that we actually like the creative efforts of every one in the group and not just the work of the so-called talented ones. We can help the boys and girls to realize a greater sense of personal adequacy if we make the art situation a noncompetitive one, and if we assure each individual that

¹ Site, Myer, "The School Neighborhood 1: Sometimes Our Art Classroom," The Ballimore Bulletin of Education, Vol XXIV, No. 3, January-February, 1947.

CHILDREN OF THIRD GRADE, ENGAGED IN MAKING FOTTERY BY THE SLIP-POURING METHOD, COME TO APPRECIATE AN ART THROUGH EXPERIENCING SOME OF THE DIFFICULTIES INVOLVED.

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¹ Site, Myer, "The School Neighborhood Is Sometimes Our Art Classroom," The Ballimore Bulletia of Education, Vol. XXIV, No. 3, January-February, 1917.

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we find something of merit and interest in all of his productions. We should encourage students to develop the attitude that whatever is their own genuine expression in art is the place for them to begin to develop in understanding."

EMOTIONAL FULFILMENT

Aestheties—the science of the beautiful, the sublime, and the ludicrous—belongs quite largely to art. Empathy, or "feeling into" a work of art, should play a much more important role in the ministrations of teachers than it does at present. Therapeutic values should be uppermost in the mind of the art teacher, for if the experiences engaged in by pupils are to affect their feelings as well as their intellects, the resolution of many of their perplexities and problems will have to be attained through art.

There is no better way. The challenge of art in living, here and now as well as in the past and in the future, must be grappled with and feelings given precedence over the customary intellectual considerations if the functional goals of art education are to be realized in its practice. If genuine individual and group aesthetic satisfactions are to be achieved in conduct—if the art experiences engaged in are to improve living in the home, the school, the community, the nation, the so-much-to-be-desired one world—art education must be made progressively expressionistic rather than conservatively initative. The child must indeed be helped to resolve many of his individual difficulties through creative art. The class must likewise be helped to resolve its social difficulties through art.

THE CURRICULUM

It is proposed that all this can be best accomplished through the integrative curriculum. Any integrated curriculum worthy of the

ART IN SCHOOL AND LIFE

name is also an integrative curriculum, since the effective integration of areas in it is aimed at integrative living, the integration of personality. Curriculum integration is the means that leads to this result. The attempt to organize experiences around a central core, such as social studies, history, or science, is not enough; nor is the organizing of experiences around all the aspects of a many-sided life in the local community sufficient.

Art should be integrated in the curriculum with whatever it is integrated with in life. Therefore the curriculum cannot afford to be anything short of life itself, in which nil the nreas contribute to effective living. The amount of integration of art and social studies should, for example, be about the same in school ns in life.

Teacher experimentation in this direction is the immediate interest of art education as the curriculum area most concerned with therapeutic and nesthetic values. Art must therefore be conceived of as experience vital to the child himself. All of his creative expressions must be charged with feeling, and his planning and fulfilling accomplished by himself alone. The teacher's task is to guide the building up of an emotionally charged background of experience, both vicarious and real, out of which release and expression may be expected to grow. What counts for most is that the experience be challenging, not that it be either vicarions or real. There must come about an inner urge for fulfillment and satisfaction on the part of the child; otherwise the result will be neither creative nor nrt but merely perfunctory activity and n waste of time that might better be expended in other areas.

EXPRESSIONISM

That the goal of creative art education should be considered as expressionistic is in accord with the soundest thought presented by

educators and art critics alike. If art is to be seriously considered as experience, then what should be accepted as art education should be in complete accord with the most enlightened philosophy of our times. The objectives of art education should emphasize organization rather than imitation, aesthetic release and fulfillment rather than realistic representation, the feeling of rightness rather than facts of mere correctness and conventional execution.

When this concept is more generally comprehended by teachers of art, we shall find genuine emotional expression holding sway in the place of meaningless documentation, true significance instead of technical perfection. And then may we not hope to find also more of mystery and joy and less of actuality and sadness than is found in what still too often passes for art education, but is actually nothing of the sort?

SUPERVISION

Supervision in the field of art education should stress the purposes to be served by art, helping the teacher to achieve integration, motivation, clarification, enrichment, and balance in his teaching. It should stress art for use as opposed to art for art's sake. In a satisfactory supervisory program an equitable relationship is maintained between drawing and painting, on the one hand, and modeling and craftwork on the other; between the experiences with information and those with activities; between art production and art appreciation.

A good general program of supervision, the purpose of which is the improvement of instruction, should be both essential and valuable to a school system, and the supervision of art education should aim to improve instruction in art as an important means of expressing and interpreting ideas and feelings, by means of which all school subjects become more meaningful and the life of the pupil correspondingly richer. Art as an organized body of aesthetic experience coordinate with other major curriculum areas should grow naturally out of the curriculum taken as a whole, while art as the culminating stage becomes an attitude and a spirit which suffuses the entire curriculum. Art should be present whenever a process calls forth in a single expression the whole nature of the individual in an attempt to interpret and to satisfy a social need.

Supervision of art education should be a cooperative professional activity based upon responsibility shared by teacher and supervisor, should help to maintain a balance between individual and social consciousness. The teacher and the supervisor should feel each other to be sincere and impartial, and the supervisory program in art should concern itself with the development, continuing growth, and enrichment of personality through the arts as means of self-expression; it should stress the worth of the individual and his capacity for growth.

Those charged with supervisory responsibility should, therefore, encourage in teachers self-expression, initiative, and independence of thought, and the art supervisory program should aim to emphasize participation in creative activities, developing the ability to plan, assume responsibility, and carry through to successful completion meaningful undertakings. It should also provide opportunities for all to engage in significant, enjoyable, informational, and creative experiences.

Since effective supervision results in constructive, practical help for the teacher, the supervisory program in art should assist the tencher to develop no effective pattern of teaching. The teacher

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- 3. How does art as a subject-matter area contribute to the educational objective of self-realization? Better human relationships?
- 4. How can art education improve one's economic efficiency? One's civic responsibility?
- 5. What are some of the psychological standards applying to art education? Some of the aesthetic standards?
- 6. How can the teacher achieve complete freedom of art expression for his class?
- 7. Discuss the integrative curriculum as it relates to art as a subject area.
- 8. What constitutes good supervision of art education?
- 9. What can and should be done to secure justifiable recognition for art in the elementary and secondary schools?

REFERENCES

- Arts and Crafts Club, Art and Industry in Education, Teachers College, Columbia University, New York, 1912 (Bonser, F. G., "My Art Creed").
- Course of Study in Art for Secondary Schools, Baltimore Department of Education, Baltimore, 1945 (Chap. I., "The Philosophy Underlying Art Education"). Barr. A. S., W. II, Burton, and L. J. Brucekner, Supervision. D. Ambleton Cen-
- Barr, A. S., W. H. Burton, and L. J. Brucckner, Supervision, D. Appleton-Century Company, Inc., New York, 1938.
- Cole, N. R., The Arts in the Classroom, The John Day Company, New York, 1940.
 D'Amico, Victor, Creative Teaching in Art, International Textbook Company, Scranton, Pa., 1941.
- Dewey, John, Art as Experience, Minton, Balch & Co., New York, 1931.
- Educational Policies Commission, The Structure and Administration of Education in American Democracy, National Education Association of the United States, Washington, D.C., 1989.
- Gibbs, Evelyn, Teaching of Art in the Schools, Greenberg: Publisher, Inc., New York,
- Glace, M. F. S., Art in the Integrated Program, published by the author, The Maryland Institute, Baltimore, 1934 (Chambers, Will Grant, "Art Creed").
- Lowenfeld, Viktor, Creative and Mental Growth, The Macmillan Company, New York, 1947.

THE INTEGRATED SCHOOL ART PROGRAM

- Munro, Thomas, and others, Art in American Life and Education, Yearbook of the National Society for the Study of Education, Public School Publishing Company, Bloomington, Ill., 1941.
- Perrine, Van Dearing, Let the Child Draw, J. B. Lippincott Company, Philadelphia., 1936.
- Read, Herbert, Art and Society, The Macmillan Company, New York, 1946.
 Sachs, Hans, The Creative Unconscious, Sci-Art Publishers, Cambridge, Mass.,
 1942.

Chapter III

Art Education to Meet Current Needs

AIMS

nox the standpoint of the school organization, art should serve to motivate and enrich the entire curriculum, and it should contribute generously to the integration of school experience. Art in the modern school should aim both to stimulate in the child the experience of creating and to help him improve the manner in which he expresses himself through creative processes; at the same time, it should aim to stimulate in him the experience of appreciating by acquainting him systematically with fine examples of the arts of various peoples, both of the present and of the past.

PROCEDURES

Little formal instruction in art should be found necessary at any level of the pupil's progress through school, although there is an appropriate place for skillful guidance by the teacher, given always at the time in the pupil's development when the help is needed. In connection with his work in construction, the pupil is entitled to be made acquainted with the industrial processes necessary to the successful transformation of materials; in representation, he should be familiarized with the various methods of handling the mediums of graphic and glyptic expression.

The typical art lesson may well be considered an appreciation lesson in which some form of purposeful activity is the usual means to emotional satisfaction on the part of the pupils, a vital experience of genuine enjoyment; otherwise the spirit of art would be lacking. If enjoyment is to be the lot of all the pupils, then the methods employed in teaching art should, in so far as practicable, be adjusted to the needs of individual members of the class, who, if placed in an inspirational environment and systematically exposed to fine things and to the various mediums of artistic expression, may be relied on to grow artistically.

After the pupil has been given ample opportunity to experiment, demonstration is often an effective means of teaching the art processes. Modern experimentation as well as traditional ways of translating thoughts and feelings into visual form will need to be demonstrated by the teacher. Thus lagging interest will he renewed, ideas clarified, and problems formulated for future units of experience. Free discussion of the principles involved should follow such demonstrations.

In all his work, the pupil should be allowed to choose the materials that seem to him best fitted to embody his own ideas. If teaching has been effective, there is little danger that the pupil himself will not possess aesthetic judgment sufficient to meet his art needs at any stage. It is for the teacher to stimulate and inspire children to set up their own aesthetic ideals and, if need be, to defend them.

THE METHODS EMPLOYED IN TEACHING ART SHOULD BE ADJUSTED TO THE INDIVIDUAL MEMBERS OF THE CLASS. WHO MAY BE RELIED ON TO GROW ARTISTICALLY. The Italicay Train, Water Color Painting by a Fifth-grade Child, Elementary Schools, Baltimore, Maryland.

a general rather than as a special subject, because of its functional importance in social and in economic life, as well as because of its broadening cultural values.

INTEGRATION

Ohviously, an effective unit of teaching must he hroader than a single school subject, while integration, in which progressive teachers so strongly believe, calls for an enriched curriculum made up of subjects that have heen carefully balanced one against the other. In the typical elementary school of the present day, this can he realized most effectively through establishing direct contacts hetween the school subjects which at this level are generally taught by a single classroom teacher.

It will be recognized, however, that in the junior and senior high schools offering a differentiated program of studies, correlation must generally be with subject matter from the fields represented hy school subjects rather than directly with the subjects themselves. Consequently, the teacher of art at the secondary school level who would help to carry on an integrated school program is expected to relate the instruction that he offers to the fields of history, geography, science, mathematics, language, home economics, and industrial arts, the trend being toward a unified school experience, regardless of the traditional subject-matter houndaries.

The planning of units of teaching, whether they be in art or in some other subject area will, therefore, sooner or later hring those engaged in their planning to the realization that, normal human experience being integrated, the curriculum must likewise be integrated. Whenever the broader aspects of any school subject are considered, it will be realized that the integration of subject matter and of school

ART EDUCATION TO MEET CURRENT NEEDS

experience is inevitable. In such an educational program, art must be made to function broadly as an integral part, the creative-appreciative part, of the elementary and secondary school curriculums.

THE ELEMENTARY SCHOOL

Throughout the elementary school, art may broadly be conceived of as a component part and frequently as the outgrowth of the entire school curriculum. Because some experience with art is involved in almost every field of human endeavor, the subject helps the pupil to learn more effectively, the pursuit of it being essential to his liberal education on intellectual as well as on aesthetic grounds. There is no history, no geography, no science, which is not intimately associated with the topics around which the art course is organized. The elementary grade teacher who instructs in all subjects experiences no difficulty in teaching art, which is so closely related to the other school studies. During his progress from the kindergarten through the sixth grade, the school child receives consistent instruction in color, drawing, and construction, which should be made use of directly in creative activity, often inspired by school experiences nrising entirely outside of the art field.

The school subject called art is then an organized body of creative and appreciative experience with materials, growing out of the life of the child. Since the modern curriculum is made up of experiences that are vital and real to him, art in the school should also afford a logical culmination for these experiences, because to be geamine, art must be experience that is vital. If the child is encouraged to express himself freely through art mediums, he will from choice often use for his inspiration those curriculum experiences that are most vital and real to him.

Since all people who are concerned about how things look must of necessity be interested in design, it follows that art education should be for the development of taste. Class discussions with lantern slides, photographs, paintings, etchings, color prints, and various products of fine craftsmanship should play an important part in the instruction offered. Oral and sometimes written reports should be encouraged. Illustrative material collected by the pupils should be mounted artistically and carefully preserved in portfolios or notebooks, each example being tastefully labeled. Written papers, too, should show good, artistic arrangement.

Wherever art has been included as an integral part of the school program, pupil participation and creative expression have been stimulated; when art has been taught for broad cultural purposes, it has never failed to function as an important integrating agent in the curriculum. Since, through the art experiences of an integrated curriculum, learning is greatly facilitated, obviously the art expression and appreciation growing out of it may be expected to serve to some extent as a measuring device for the effectiveness of teaching in general.

THE JUNIOR HIGH SCHOOL

There is no break between the instruction offered in the elementary schools and that offered in the secondary schools. The course helps boys and girls to recognize and to enjoy beautiful things, thus prompting them to frequent the parks and art galleries, and to be alive to the influences of beauty in its many forms, in nature, in painting, in architecture, in sculpture, in products of industry, and even in commercial advertising.

ART EDUCATION TO MEET CURRENT NEEDS

The junior high school period being particularly the time of educational and vocational adjustment, special attention should be given at this stage to the talented pupil, who is carefully watched and encouraged to go on with his special art training. The course thus helps boys and girls to find themselves, and it helps the school to find out what special talent they possess.

As pointed out by Haney, "Art is not for the few. It is for the many, for the many have to use it. It is not held that the training of the public schools will produce artists, but it is held that it will raise the standards of taste throughout the community. We cannot have people with high nesthetic standards without an effect on trade. People who know better things demand better things. Thus the nrt teaching of the public schools has a practical relation to the business interests in every community."

THE SENIOR HIGH SCHOOL

Art is taught in the senior high schools because it figures so largely in business, manufacturing, and engineering; because it helps the pupil to a fuller understanding of his other schoolwork; because it enables him to employ his leisure more advantageously; and because it provides for his initial training as a prospective worker in the arts or in art teaching.

Throughout the school system, nrt provides opportunities for crentive self-expression, helping boys and girls to learn more effectively; it is essential to their all-round individual and social growth, calarging their cultural outlook and enriching their lives. It develops in them appreciation which enables them to improve their personal

James P. Haney, Director of Art in High Schools of New York City, 1909-1925.

appearance, their homes, and their surroundings; it nurtures in them artistic abilities that are of value in any productive work they may undertake.

The aims of art teaching are to be attained through a careful consideration of pupil needs, through the determination of what experiences should be engaged in to meet these needs, and through the carrying on of effective instruction.

ORGANIZATION OF INSTRUCTION

A balanced unit of teaching in art is normally made up of a number of clearly conceived parts. The unit should embrace information as well as activity, the information included being both general and technical, in order to assure a broad cultural background. The activity growing out of the unit should he both directed and creative, in order to assure consistent pupil growth in the manipulative phases of the subject.

Although general information is of necessity nontechnical, the general information to he included in any art teaching unit should he as closely related as possible to the art interests around which the unit is organized. The technical information should have to do with technique and with aesthetic considerations. Directed activity implies activity which is not creative, its purpose heing nevertheless to develop those particular skills which will find fruition in creative

THROUGHOUT THE SCHOOL SYSTEM ART IS ESSENTIAL TO THE AESTHETIC GROWTH OF BOYS AND GIRLS, ENLARGING THEIR SOCIAL OUTLOOK AND ENRICHING THEIR LIVES. Elephant and Attendant, School Circus, by Boys of Eighth Grade, Scarsdale, New York, Public School. expression. Creative activity is activity which is not directed; it is the expression.

Even though careful planning is necessary in art as in other fields of education, it must constantly be kept in mind that the pupil should occupy a very important place in the planning. "Art Education," according to Gearhart,1 "develops the child's use and awareness of art in his daily life. It is not designed to provide harmless, busy work, nor to make artists of all the children. The emphasis in art is on its contribution to the child's well-balanced personality and social efficiency. It is a wholesome, emotional outlet in work as well as in play. Opportunity is offcred for varied experiences based on the child's interests and needs. Possibilities include painting, drawing, modeling, building and simple craftwork. Teacher and pupil share the adventure and responsibility of choosing activities that are satisfying and socially valuable. The final justification of art in the school program is the permanent satisfactions of production and appreciation that come to the pupils. Art teachers are striving to develop character and good taste through the fundamental unity of aesthetics, ethics and social eoncern."

RELATION OF INFORMATION TO ACTIVITIES

As art is concerned primarily with the transformation of natural or raw materials, the art period is given over largely to the teaching of

¹ Gearbart, May. "Experience in the Arts," contained in Four Children and Their Schools, a publication of the Board of Education of the City of Los Augeles, California, 1933.

THE CONTENT OF THE ART COURSE SHOULD CONSTITUTE A CONCISE SURVEY OF THE ART ACTIVITIES EVOLVED BY THE HUMAN RACE. Ceramic Processes (A Group Activity), Parts Carred from Soap and Arranged by a High School Art Class, Peabody High School, Pittsburgh, Pennsylvania,



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general and technical information in connection with activities; to a consideration of art mediums, including both materials and processes, and to the relative merits of various art products.

In providing the general information in connection with any unit of teaching the purpose of doing so should be kept clearly in mind. "One of the most educational objectives of modern art instruction," observes Whitford, "is to provide training that will stir the imagination, to develop in the individual the powers to visualize and dramatize, and to stimulate him to creative endeavor."

Since certain design principles are involved in every creative problem, wide scope for handwork will be afforded with suggestions for a large number of individual and group products, together with the necessary general directions for carrying these to completion. Handwork, including hoth drawing and construction is undertaken as a means of attaining insight through manipulation and expression through participation; expression is here to be considered as a means to general education and not as an end in itself.

The social studies, English, and other related curriculum fields will furnish a rich background of cultural information which should make all of the activities engaged in meaningful to the pupils. The content of the art course should, therefore, constitute a concise survey of the art activities evolved by the human race.

General information is to be regarded as but one element in the art experience of the curriculum, the enlightening and the stimulating part out of which the activity with materials will inevitably grow; technical information, as the evaluating part, which will enable the pupil to appreciate his own creative efforts and the works of the masters. The second part of the art educational experience—directed and creative activity, the experience with materials will he discussed later.

¹ Whittord, W. G., An Introduction to Art Education, D. Appleton-Century Company, Inc., New York, 1936.

ART EDUCATION TO MEET CURRENT NEEDS

The mission of art in the curriculum is quite largely the providing of creative handwork, experiences with the mediums and unaterials of concrete expression. Art, therefore, must concern itself not only with painting, sculpture, and architecture, but also with materials, processes, and products of manufacture, with utilitarian as well as aesthetic values, and with the contributions of those engaged productively in the arts. The art teacher will make a special effort to provide conditions favorable to activities that will be broadly educational, to encourage those activities that best promote learning.

ASPECTS OF INFORMATION

Although general information is nontechnical, it must be recognized that the general information to be included in any art teaching unit should nevertheless be as closely related as possible to the specific topic around which the unit is organized. Clues to what may constitute the general information are furnished by such topics as the following, which refer to ideas that are general, since they do not specifically refer to art: geography, history, evolution, Eaglish, language, reading, spelling, writing, literature, music, arithmetic, science, health, nature study, current events, purpose, masters, consumers, guidance (see diagram, page 83).

Technical information has to do with technique and with aesthetic considerations. Chies to what may constitute the technical information are furnished by such words as line, mass, color, design, rhythm, balance, art form, representation, lettering, construction, fitness, process, technique, medium, harmony. The technical information included in the nrt course of study embraces, therefore, subject matter dealing with line, mass, and color, and with structural principles of design, with lettering, and other special phases of the subject that pupils will need to know about. A use for such information will be found in creative problems, as in the selecting and combining

THE INTEGRATED SCHOOL ART PROGRAM

f objects and of parts, and in the making of drawings, designs, and constructed products.

SEQUENCE OF INSTRUCTION

The following sequential steps are distinguishable in most units of work in art: (1) orientation, (2) design, (3) forming products, (4) appreciation. Orientation signifies finding one's hearings, getting squared away for the work anticipated. Design implies conceiving and planning, without regard to whether or not a drawing or a model is to be made in advance of the actual construction of a product. Design is interpreted to include decoration. Forming products involves the transformation of materials into nrt form, thus accomplishing the purposes of design. Appreciation involves judgment of the educational results, as well as evaluation of the art products turned out by the members of the class.

THE CREATIVE ASPECT OF ACTIVITY

Children naturally express their ideas and feelings in the things they create, the best creative results being those secured where the acquisition by the pupils of significant art information guarantees that expression shall be the adequate embodiment of ideas. Today the subject of art not only involves expression on the pupil's part; there is always a worth-while motive back of it, and the form that the expression takes must be appropriate to the problem at hand. School experience will be recreational to the extent that the expression has not been formalized by the teacher.

WORKS OF INDUSTRIAL ART ARE THE OUTGROWTH OF INSPIRATION COUNNG FROM A DESIRE TO CREATE PRODUCTS TO MEET SPIRITUAL AS WELL AS MATERIAL NEEDS. At of the Renaissance, Monochrome Linoleum Print on Monl's Cloth, Produced with Nine Separate Blocks by Pupils of Tenth Grade, Baltimore City College (High School for Boys), Baltimore, Maryland.



That which is present in a work of art as indicative of thought and feeling is called creative expression. An artist's creative expression is controlled by inspiration, or the impulse to create as manifested in all artistic endeavor; by memory, which releases the power to create an object previously perceived; by imagination or fancy, which releases the power to form an object not previously perceived. The creative expression in a work of art is manifested by the presence of feelings or of emotions, such as joy, grief, fear, hate, awe, reverence, longing, and aspiration; and by the intensity of expression. An artist puts something of himself into his work. That which differentiates the work of one artist from the work of other artists is called personality. Without personality there can be no art.

Creative activity heing activity that is not directed, the clues to the meaning of creative activity are to he found in such words as freedom, originality, experiment, imagination, inspiration, emotion, expression, interpretation, evaluation, appreciation (see diagram on page 83).

ART AS EXPERIENCE

Paintings. Paintings are the outgrowth of inspiration coming from a desire to experience beauty by conveying thoughts and feelings through creating significant forms. Thus reverence, devotion, and aspiration are shown in religious paintings; joy, grief, fear, love, and hate, in genre paintings; patriotism, in historical paintings. Mystery, tranquillity, and awe are often expressed in portraits. Most of the emotions and other feelings are expressed in paintings of animals. Emotions are sometimes expressed even in still life paintings.

Buildings and Statues. Buildings are the outgrowth of inspiration coming both from a definite need on the part of the architect to ex-

press himself as an artist, and from a definite need on the part of the people for buildings. Joy is expressed in theatre buildings; grief, in memorial buildings; fear and hate, in fortresses and prisons; awe, reverence and aspiration in churches. Personality is shown in nll types of buildings. In every age architecture has served as a mirror to reflect the characteristics and the needs of people in the buildings they erected. Sculptures are the result of emotion and inspiration culminating in a desire to experience beauty and to convey the experience to others; to create significant forms; to perpetuate ideals and memories; to make the environment more beautiful. Works of sculpture express joy, grief, love, hate, fear, awe, reverence, and other feelings. Sculpture reveals personality. The sculptor's temperament, mentality and nrtistic taste are all revealed in his work.

Manufactured Articles and Advertisements. Works of industrial art are the outgrowth of inspiration coming from a desire to create products to meet spiritual as well as material needs. The craftsman-designer exercises imagination or fancy in the forming of products, both in their construction and in their decoration. The products of industrial art reveal personality in the individuality of the artist's expression, shown by his originality and sometimes by his inspired use of historic examples and of nature. Works of commercial art are the outgrowth of inspiration coming from a desire to experience beauty through the creation of an advertising composition or of a display of products.

GENERATING CREATIVE EXPRESSION

Drawings or paintings which are the culmination of experiences of pupils should be creative; they should be the free and individual expressions of the children who produce them, without the subject matter, the art form, or the technique being imposed by the teacher. This does not mean that the foundation for such expressions should not be carefully laid by the teacher in advance of the process of creation.

Such a foundation implies the stimulating and nurturing of aesthetic experiences. These may be either real or vicarious. The incentive or inspiration for creative expression may come either from the child's actual contact with life or from his indirect contacts with life made through reading, through the observation of pictures, and through other means. In any case, the teacher must "set the stage" in such a way that the child's interaction with the environment will demand an outlet in some form of creative release, for the child's mind should he so permeated with and dominated hy his experiences that he will he driven from within to do something about them, to originate or huild something. A good way for the teacher to secure this state of mind on the part of the pupils is to promote in every way possible classroom situations that will contribute to this end. This means providing at all times stimulating and inspiring surroundings, as well as materials that will interest and challenge the child and satisfy his artistic impulse to create.

Pupil experience, if properly stimulated and guided, will inevitably result in art expression. While a unit of work is in progress, the teacher should make clear to the class the various visual aspects of the unit which are essential to an understanding of it and which would, therefore, have a direct hearing on the creative expression growing out of it.

A background of experience for art expression with materials can sometimes be provided through the preliminary showing of illustrative material such as objects and prints, and the use of demonstration, dramatization, and class discussion. Class visits to institutions and localities where significant objects are to be seen and experience ac-

quired are also desirable. Pupils might, under certain conditions, he taken on an excursion to a neighboring store, factory, or public building; to the art, science, or history muscum; or to the public library. Sometimes children should be encouraged to make visits to such places individually rather than in a group. This vital pupil experience should, under effective teaching, grow into some form of appropriate graphic or plastic expression.

In order to promote creative expression, the teacher may help the pupils to recall and talk about their experiences, and sometimes to describe minutely the objects and episodes that have interested them most. As the themes are presented, the teacher may well make a list on the blackboard of the various topics suggested. Each theme may then be discussed according to its inspirational possibilities.

The list of themes compiled by the class should be found helpful to the pupil in deciding on a title for his work. The final choice of theme should, however, be left entirely to the individual child, even if it should not relate to the unit of teaching in progress at the time. A list of themes for products that have been used and found satisfactory under certain conditions will be found on page 69.

Likewise, the actual carrying out of an illustration should be left to the individual child, unless he should ask for help which the teacher is able to give. The discussion of art principles, such as those teacher is composition, color, and representation, should generally relating to composition, color, and representation, should generally be left until the evaluation or appreciation period which is held at the end of the lesson.

FACILITATING EXPRESSION

Every normal child is callowed with the impulse to express himself in a concrete way, and the satisfaction of this impulse demands that he be given an opportunity in school to manipulate a variety of materials constructively. With a view to assisting the teacher in the task of helping children translate their feelings into appropriate material form, the following suggestions are offered with the hope that they will make possible greater art educational returns from activities.

- 1. Since a purpose underlies all ereative activity, make every effort to discover the pupil's purpose before passing judgment on his motives.
- 2. The child's standard of what constitutes a good job should be respected, while an effort is made to stimulate its development and growth. Anything that is worth doing at all is worth doing
- 3. In craftwork, in so far as it is practicable, teach children how to use actual industrial processes and materials. In such activities do not encourage pupils to make use of inappropriate processes, such as the painting of clay to simulate glazed pottery. Dishes are made of clay; if they are to be glazed, glaze should be used, not paint.
- 4. In modeling and other craftwork with a representational purpose, the mediums and processes used should be those that will best embody the idea to be expressed. Thus, fruit, meat, and other products or objects may be represented with elay, plasticene, plastic wood, or other mediums, as desired. In all such creative work, do not confine pupils to the legitimate industrial materials and processes.
- 5. Remember that the child's aesthetic standard should be respected. Size and scale are relatively unimportant as compared with imagination and design. Yet the ultimate ideal set up for a craft

THERE IS AN IDEAL IN CHILD ART, ATTAINABLE BY THE CHILD, AS WELL AS AN IDEAL IN ADULT ART. Erecting the Circus Tent Early in the Morning, Chalk Drawing by Henry Wisniewski, Age 13, Eighth Grade, Patterson Park Junior High School, Baltimore, Maryland. product should be that accepted generally by people of good taste. For instance, the published book should be the bookmaking ideal; the manufactured dish, the dishmaking ideal.

- 6. Wooden and pasteboard boxes and tin cans and boxes may be decorated appropriately with oil or enamel paints. Paint is, bowever, a questionable medium for decorating either windows or bottles. For similar reasons do not encourage pupils to ornament bottles or other glass objects by pasting paper patterns on them.
- 7. After the child has been given an opportunity to experiment, demonstration is often an effective method for teaching such processes as measuring, cutting, squaring, pasting, gluing, sawing, and painting. Do not expect children to make satisfying use of materials without being taught how to perform the processes essential for their success-
- 8. Encourage children to use neutral colors for painting such articles of furniture as window boxes and plant crocks. Vivid orange, red, yellow, and other strong colors will unduly attract attention away from the plants. Neutral colors are best for all such purposes.
- 9. The supplies of the class should be carefully arranged and otherwise taken care of by the teacher if, in turn, the pupils are to be expected to care for their materials. This applies to paste, elay, wood, nails, and paint, as well as to crayon and paint boxes, brushes, hammers, and other tools. There should be a place for everything in the room and everything should be kept in its place when not in use.

SUGGESTED THEMES FOR CREATIVE EXPRESSION

A helpful magazine article dealing with creative work in the schools contained the following significant comment: "There is an

Thurman, Arthur B., "Creative Work in Painting." The Ballemore Bulletin of Education. Jeanny, 1934.

ideal in child art, attainable by the child, as well as an ideal in adult art. To set an adult standard would he to force an unnatural and consequently useless method of expression which does not contribute to the personal development of the student at all. The fact that the child expresses his experiences in a way different from that of the more mature artist is all the more proof that it is genuine, and not imitative." With these thoughts in mind let us consider at this point the appropriateness of a number of themes which have been selected by children themselves for their own creative work.

In Painting. Street Fair; A Busy Corner; Summer Sport; The Game I Like Best to Play; At the Zoo; Shoveling Snow; Fire Drill; At the Market; Making Garden; A Rainy Day in the Country; Cbildren Play Hop Scotcb; The Circus Parade; A Pienie; Going to Cburch; House by the Roadside; Beggars; The Funeral Procession; School Is Out; After School; Homework; Moving Clouds; In Fairy Land; Jungle Scene; Party Dresses; The Birthday Party; Holidays; At the Movies; Playing in the Park; The Football Game; Walking against the Wind; Main Street; Traffic at Rush Hour; Feeding the Chickens; It's All Wild; Airplane over the Mountain; Cherry Blossoms in Washington; The Flower Show; The Railway Train Crossing a Bridge.

Moon Making a Pearly Path on the Water; Storm at Sea; Goiag Fishing; Fishing; Harbor at Sunset; The Ferry Boat; Swimming in the Sunshine; The Boat Race; Sailing Away; Lighthouse at Night; Playing on the Beach; Seashore in Winter; Ocean Liner and Tugboat; Lake at Sunrise; Boat Going under a Bridge; The Viaduet.

Stevedores at Work; Newspaper Boy; Our Family; Baby Sister; A Good Neighbor; A Peddler; Hurdy-gurdy Man; Lady at the Library; Country Dance; Youag Girl; My Cousin Billy; Captaia of product should he that accepted generally hy people of good taste. For instance, the published hook should be the bookmaking ideal; the manufactured dish, the dishmaking ideal.

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Stevedores at Work; Newspaper Boy; Our Family; Baby Sister; A Good Neighbor; A Peddler; Hurdy-gurdy Man; Lady at the Library; Country Dance; Young Girl; My Cousin Billy; Captain of the Team; Sally at the Blackboard; Mother with the Vacuum Cleaner; A Salesman; Glee Club Singers; Child with a Doll; A Teacher; The Family Doctor.

Electric Toy Train under a Bridge; Toy Autos; Dolls; My Roller Skates; My Favorite Toys.

In Sculpture. The Country Child; Grandfather; Skating; Make Believe; Masquerader; School Days; Safety First; Home Run; A Touchdown; Victor of the Race; Policeman; The Boy Scout; A Girl Scout; Winter Fun; Full of Pep; Spring Fever; The Politician; Flower Vendor.

Alley Cat; Stray Dog; The Hunter; The Wounded Deer; The Lame Horse; Rabbit Eating a Carrot; Forever Young; Animal That Ought to Be; Polo Player; The Four Horsemen (War, Pestilence, Famine, Death); Mounted Policeman.

In Architecture. Factories at Twilight; The Theater; Building Houses on the Avenue; Big Apartment Houses; Skyscrapers at Night; Hangars at the Airport; Our School Building; Barns and Silo; Memorial Hospital; The Art Museum; The Carnegie Library; Church in a Snowstorm; Homes of Other Days; Pavilion in the Park in Summer; The Courthouse; Our Railway Station; Five-and-ten-cent Store; Market Place; The Department Store; A Filling Station; The Post Office; Public Garage.

TO PRACTICE SCULPTURE SUCCESSFULLY AN INDIVIDUAL MUST POSSESS ARTISTIC INCLINATION; CAPACITY TO UNDERSTAND AND INTERPRET FORM; INAGINATION AND VISION. Animal Form Being Created in Sandstone by a Senior Highschool Boy at the Aliquippa High School, Aliquippa, Pennsylvania.



Christmas Garden; Landscaping the School Grounds; Community Improvement Plan; How Architecture Has Developed; Models of Buildings; A Model Town; An Architect at Work.

In Industrial Art. Going to Work; The Weavers; Creative Hands; Labor Troubles; The Strike; Potters at Work; A Craftsman; Modern Machine Manufacturer; The Printer; Piecework; Quitting Time; Drawings to Show Tools, Materials and Processes; Factory Workers; Woven Fabrics; Block-printed Textile; Tie-dyed Scarf; Batik-dyed Handkerchief; Appliqued Pillow Cover; Embroidered Decorative Picture; Copper Plaque with Repoussê Decoration; Brass Letter Opener; Clay Tile; Terra-cotta Figures.

Glazed Bowl; Vase; Bound Book; Toys Carved from Wood (animals, boats, vehicles, airplanes); Wooden Paper Knife with Carved Decoration; Leather Book Cover; Leather Belt; Leather Bill Fold; Masks; Musical Instrument; Marionette; Stage Scenery and Stage Properties.

In Commercial Art. Drawings to show tools and processes: How Advertising Art Is Carried On; Sign Painters at Work; The Bill Posters; City Billboards Seen at Midnight; Neon Signs at Night; Radio Broadcast; Distributing Handbills; Window Shopping.

Poster, Signs; Greeting Card; School Emblem; Club Emblem; Calendar; Book Cover; Advertising Illustration; Book Jacket; Folder; Pamphlet Layout; School Paper and Magazine Dummy; School Annual Dummy; Block-printed Illustration for School Publication; Place Card; Menu Card; Letter Head; Monogram; Sticker; Cartoon; Exhibit Plan; Bulletin-board Arrangement; Exhibit Arrangement; Arranging the School Exhibit.

ART EDUCATION TO MEET CURRENT NEEDS

In a Number of Fields. A unit of teaching in an eighth grade was organized around an imaginative theme which was stated in the form of the following story:

"By the year 5000, there were no longer any animals for the zoos. All bad been killed by bunters, or had died. The politicians called in the scientists, who bad then learned how to give life to any form created. They were asked to create new animals for the zoos. After these were completed, a celebration was beld, the animals performing, and the scientists and politicians taking part in the ceremonies."

Animals for the ceremonies, which took the form of a circus, were made by the boys (see illustration on page 55). There were twelve animals in all. Framework for the animals was made of heavy baling wire and chicken wire. Over these was sewn burlap. The animal was then painted with a thin glue size. This surface takes paint well. Powdered paints were used. Old burlap bags were brought in by the pupils. The whole affair was staged by the boys. A mechanical man in which one of the boys was placed acted as master of ceremonies. The script was written by an English class. Advertising was done by the art classes. Animal dances, contests, and a costume parade with prizes formed the program. Each animal had a costumed keeper. A few large "mummer" heads were made and worn with costumes. Most of the animals were new creations with new names given to them.

THE DIRECTED ASPECT OF ACTIVITY

The pupil soon learns that expression is not all there is to art; that his expression must be controlled, not by his teacher, but by hinself. "Man by nature is a skill-hungry animal," writes Jacks,¹

¹ Jacks, L. P., Principal, Manchester College, London, England.

"His nature is defined by his function, and his function, as revealed alike by the structure of his body and his mind, is the exercise of skill. Taking the 'self' all around, it seems to me that its hunger for skill is the most salient and universal feature of it. This is why the finest examples of self-expression are to be found in the great arts. Here it is that the self most completely attains the joyous satisfaction of its deepest needs, while satisfying at the same time the needs of the social environment, with which it is integrally one. Without some form of skillful activity on lines that are socially valuable, self-expression is impossible. Education is the discipline of the self which leads to that result."

Directed activity is activity which is not creative; its purpose being, nevertheless, to develop in pupils the particular and special skills that will find fruition in the creative work. Clues to the characteristics of directed activity are to be found in such words as dictation, tracing, copying, demonstration, criticism, control, drill, reading, and visiting (museums, libraries, factories, stores and other places of interest and value).

"Through first-hand experiences, creative expression with materials and discussion of art values," says Gearhart, "we help boys and girls in recognizing heauty as a way of living; in recognizing the practical value of art not in terms of dollars and cents but in efficient recognition and choice."

¹ Gearhart, May, Formerly Art Supervisor, Los Angeles, Calif.

RHYTHM MAY BE DEFINED SIMPLY AS MOVEMENT IN A DESIGN. Sanda Claus, A Painting in Transparent Water Color, by George Kenyon, First Grade, Public School No. 118, Queens, New York City.



ART EDUCATION TO MEET CURRENT NEEDS

In short, the art objectives cannot be realized in teaching unless the child's creative experience is to be aesthetically reconstructed, to the end that his artistic taste and skill will improve. It devolves upon the teacher to help the child to realize wherein lies appropriateness in the use of materials, as well as to help him to realize his dream creatively, thus securing aesthetic satisfaction through the manipulation of materials. It should be kept in mind, further, that the teacher should assist the child always at his own level of comprehension and muscular coordination.

OUTCOMES

The outcomes of creative activity can scarcely be separated from the outcomes of directed activity, since both are contributed to by all that the child does and learns from the unit of experience taken as a whole. These outcomes may be stated briefly as follows:

- 1. Development of a social organization where children learn to respect the rights of others, to work together, to understand democratic ideals and to work toward attaining them.
- 2. Increased general and technical knowledge gained largely through the directed and creative activities.
- 3. Increased ability in the use of mediums, which includes both
- 4. Growth in the handling of tools and in responsibility for the tools and materials. care and economical use of materials.
 - 5. Growth in the development of qualities of leadership.
- 6. Increased knowledge of how and where to get help in solving problems.
 - 7. Growth in the development of critical judgment.

THE INTEGRATED SCHOOL ART PROGRAM

QUESTIONS FOR DISCUSSION

- Define art as a school subject and tell how you would justify offering it as a
 major subject in elementary and secondary schools. Why should art be considered a general rather than a special school subject?
- 2. Describe and explain the differences which characterize the art instruction offered at the elementary and the junior and senior high school levels of the school system. What part does drawing play in the learning process?
- What is the place of art in an integrated program of studies? How may it sometimes serve as a measure of the effectiveness of teaching in general?
- 4. What relationship should exist between information and activity io an effectively organized teaching unit in art?
- 5. What do you think is the reason for including general information in the art teaching unit? Why could not the general information be taken care of by other curriculum subjects? What would be your criteria for judging the appropriateness of technical information in the teaching unit?
- Give an example of a technical problem likely to arise in the art class, in each of the following: color, arrangement, representation.
- Into what organization topics would you divide the field of art for the purpose of classroom instruction? Distinguish between industrial art and commercial art.
 - 8. Why should the subject matter of design be stressed throughout the art course?
 - Distinguish between directed activity and creative activity in the art teaching unit. Why are both kinds of activities provided for in the art course?
 - 10. Should the child always feel a need for directed activity or can the teacher sometimes prepare the way for later creative activity by giving a directed lesson?
 - 11. How much freedom should the child be allowed in selecting a theme for his creative work? What part should the teacher play in a creative activity

ART EDUCATION TO MEET CURRENT NEEDS

- 12. How would you use the list of suggested themes for creative work, in teaching an elementary school class? A high school class?
- 13. Discuss the dangers to creative results in encouraging pupils to copy pictures from books and other sources.
- 14. What can the teacher do to help generate creative expression on the part of the children?
- 15. Why is it desirable to provide classes with a variety of materials to work with?
- 16. In what ways do people in general exercise creative ability in their everyday activities?

REFERENCES

EDUCATION

As a result of studies in psychology, of deductions from art tests, of the newer philosophy of art and education, and of the present-day types of courses of study in other subjects, methods of teaching art bave undergone significant changes within the past few decades. In spite of innovations in procedure, some educators still believe that the success of teaching is not dependent upon the method but upon the abdity of the teacher; other groups are of the opinion that instruction in art sbould conform to the new methods of education. The varied points of view presented in the references that follow hring before us many challenging phases of the subjects treated.

Barnes, E. A., and B. M. Young, Children and Architecture, Teachers College, Columbia University, New York, 1932.

Cole, N. R., The Arts in the Classroom, The John Day Company, New York, 1910. D'Amico, Victor, Creative Teaching in Art, International Textbook Company, Scranton, Pa., 1941.

Dewey, John, Art as Experience, Minton, Balch & Co., New York, 1934.

Good, C. V., ed., Dictionary of Education, McGraw-Hill Book Company, Inc., New York, 1945.

Perrine, V. C., Let the Child Draw, Frederick A., Stokes Company, New York, 1936. Rivlin, H. N, and Herbert Schueler, ed., Encyclopedia of Modern Education, Philosophical Library, Inc., New York, 1943.

Philosophical Lidray, and A. E. Schoelkopf, Western Youth Meets Eastern Sweeney, F. G., E. F. Barry, and A. E. Schoelkopf, Western Youth Meets Eastern Culture, Teachers College, Columbia University, New York, 1012.

- Tomlinson, R. R., Picture Making by Children, The Studio Publications, London, 1934. (Bound in stiff covers.)
- Tomlinson, R. R., Crafts for Children, The Studio Publications, London, 1935. (Bound in stiff covers.)
- Winslow, L. L., Art in Elementary Education, McGraw-Hdl Book Company, Inc., New York, 1942.

APPRECIATION

We of the present have a rich heritage in the wealth of artistic achievements which have been left us through man's power of transforming emotions and feelings into visible forms of expression, which have varied and changed with the times and with the intermingling of many cultures, so that it is not strange that understanding is limited where there has been no hasis of real study of the arts. The accompanying list does not go into technical matters. It attempts rather to offer an introduction to books which will serve as touchstones to a grenter awareness of and sensibility to the beauty that has been wrought on canvas, in wood,

- Addison, J. D., Arts and Crafts in the Middle Ages, L. C. Page & Company,
- Bartas, Jolanda, and D. G. Spicer, Latin American Costumes, Hyperion Press of New York, Inc., New York, 1941.
- Benson, J. H., and A. G. Carey, The Elements of Lettering. John Stevens, Newport,
- Brodeur, A. G., The Pageant of Civilization, Doubleday & Company, Inc., New
- Cairns, Huntington, and John Walker, Masterpieces of Painting from the National
- Gallery of Art, Random House, New York, 1943.
- Chandler, A. C., Story Lives of Master Artists, Frederick A. Stokes Company,
- Chandler, A. C., Treasure Trails in Art, Frederick A. Stokes Company, New
- Chency, Sheldon, A World History of Art, The Viking Press, Inc., New York, 1943. E-Yeh-Shure, I Am a Pueblo Indian Girl, William Morrow and Co., New York,
- Gardner, Helen, Understanding the Arts, Harcourt, Brace & Company, Inc.,
- Hollyer, V. M., and C. G. Huey, A Child's History of Art, D. Appleton-Century

ART EDUCATION TO MEET CURRENT NEEDS

- Holland, R. S., Historic Inventions, Macrae Smith Company, Philadelphia, 1911. Langdon, W. C., Everyday Things in American Life, 1607-1776, Charles Scribner's Sons, New York, 1937.
- Rohinson, E. F., and T. P. Rohinson, Houses in America, The Viking Press, Inc., New York, 1936.
- Roos, F. J., An Illustrated Handbook of Art History, The Macmillan Company, New York, 1937.
- Stiles, H. E., Pottery of the Ancients, E. P. Dutton & Co., New York, 1938.
- Stiles, H. E., Pottery of the American Indians, E. P. Dutton & Co., New York, 1939.
- Stiles, H. E., Pottery of the Europeans, E. P. Dutton & Co., New York, 1940.
- Thurston, E. L., High-lights of Architecture, Bridgman Puhlishers, Pelham, N.Y., 1930.
- Toor, Frances, Mexican Popular Arts, Rohert M. McBride & Company, New York, 1939.
- Wheeler, Monroe, Painters and Sculptors of Modern America, The Thomas Y. Crowell Company, New York, 1942.

TECHNIQUES

In all expressive activity the idea to be embodied in art form by the child, rather than rules or principles, should he regarded as of paramount importance. The use that the child makes of materials creatively to meet his needs is what counts most. His ahility to use materials will have to he developed and strengthened, therefore, not preceding the actual manipulation process hut accompanying the process, as he works with the materials. For example, if he would use crayon and chalk effectively he should acquire information about these mediums in the processes of using them. The books listed should help the teacher to help the pupils when the need arises for a knowledge of processes and techniques.

Benda, W. T., Masks, Watson-Guptill Publications, Inc., New York, 1944.
 Biegeleisen, J. I., The ABC of Lettering, Harper & Brothers, New York, 1940.
 Bonser, G., and L. C. Mossman, Industrial Arts far Elementary Schools, The Macmillan Company, New York, 1923.

Ellis, G. and R., Modelling for Amateurs, The Studio Publications, Inc., New

York, 1939. Hake, H. V., Here's How (a guide in stagecraft), Row, Peterson & Company, Evanston, Ill., 1942.

THE INTEGRATED SCHOOL ART PROGRAM

- Lamprey, Louise, The Story of Weaving, Frederick A. Stokes Company, New York, 1939.
- Mills, W. H., and L. M. Dunn, Marionettes, Masks and Shadows, Doubleday & Company, Inc., New York, 1941.
- Newkirk, L. V., Integrated Handwork for Elementary Schools, Silver Burdett Company, New York, 1940.
- Norling, Ernest R., Perspective Made Easy, The Macmillan Company, New York, 1941.
- Peet, Creighton, This Is the Way We Build a House, Henry Holt and Company, Inc., New York, 1940.
- Rice, W. S., Block Prints, The Bruce Publishing Company, Milwaukec, 1941.
- Shaw, R. F., Finger Painting, Little, Brown & Company, Boston, 1934.
- Smith, Susan, Made in America, Alfred A. Knopf, Inc., New York, 1929.
- Smith, Susan, Made in Mexico, Alfred A. Knopf, Inc., New York, 1939.
- Smith, Susan, Made in France, Alfred A. Knopf, Inc., New York, 1981.
- Steindorff, George, and C. S. Keith, When Egypt Ruled the East, The University of Chicago Press, Chicago, 1942.
- Thach, Stephen D., Finger Painting as a Hobby, Harper & Brothers, New York,
- Wallace, C. E., Commercial Art, McGraw-Hill Book Company, Inc., New York,
- White, W. C., Made in Russia, Alfred A. Knopf, Inc., New York, 1932.

Chapter IV

The Organization of Instructional Material

record of teaching practices, made by teachers themselves, a careful examination and analysis of such outlines should reveal to those who would plan courses of study some of the methods involved in their preparation. Such an analysis should help one not only to rationalize the subject matter involved but also to develop new teaching material.

Even a cursory examination of written descriptions of units of teaching will generally reveal a considerable number of words and phrases such as ask, begin, cleek, demonstrate, emphasize, and hold responsible for, all of which will be found to appear frequently. A more exhaustive search will add many other items to the growing list until it finally comes to include most verbs and verb phrases that teachers use in describing their classroom procedures.

The list of verbs and phrases appearing on pages 408 to 415 was contributed by art teachers. Some of the words were gleaned from the descriptions of units of teaching found in various courses of study and in books by Burton, Harap, Klar, Mathias, Welling, and Whitford, while others not found in the descriptions referred to are included because their contributors were accustomed to use them in preparing

their own written plans. The list as finally approved included approximately 400 words and phrases, which for want of a hetter system of organization were first arranged alphahetically. Once the typewritten list had been given careful study, however, it became apparent that, when used in the sense that teachers use them, many of the words and phrases conveyed practically the same meaning, even though their individual, general, or literal meanings might not be considered as synonymous. Thus it came about that the suggestion of grouping them according to educational import rather than to literal meaning was adopted.

After the list of verbs and verh phrases had been compiled, the teachers were ready to embark on the systematic collection of new course-of-study material and the organization of it into written plans. Since the preliminary examination of course-of-study outlines had convinced them that good syllabuses are made up largely of descriptions of units of teaching, it was decided to build experimentally the new course of study by preparing written descriptions.

THE UNIT OF TEACHING

According to Trillingham, "The unit as a basis for instruction and learning originated out of the necessity to hreak up the total world of human experience into practical subdivisions for facilitating the administration of classroom procedure." "Thinking of the unit as one of the divisions of measurement," says Roy, "we may say

¹Trillingham, C. C., "Exrmarks of a Functional Unit," Journal of the National Education Association, December, 1935.

¹Rov. Vincent & H.

Roy, Vincent A., Unpublished Teacher Training Course of Study, Pratt Institute, Brooklyn. New York, 1938.

CREATIVE APPRECIATION MAGINATION EXPRESSION NTERPRETATION NSPIRATION EVALUATION EMOTION ORIGINAL E XPERIMEN FREEDOX ACTIVITY **DEMONSTRATING** DIRECTED VISITING SUGGESTION DACTATION READING RACIN RITICIS COPYIN ORILL INFORMATION TECHNICAL EPRESENTATION LETTERING HARMONY FORM FITNESS. M EOI O M DESIGN C0108 LINE MASS CONSUMER GENEBAL MASTERS GUIDANCE GEOCRAPHY LANGUACI ARITH MET SCIENCE HEALTH 315 O M 11STOR)

that its extent or relative place in the organization of educational materials is comparable to the foot as a measurement of linear distance; the inch being comparable to the individual lesson plan; a semester's work comprised of more than one unit, to a yard; a course of study to a rod, and a curriculum for twelve years to a mile. For the teacher, the development of the course of study becomes the main objective or milestone to be reached foot by foot through the preparation and carrying out of good teaching units."

If the content of a unit should be confined to a single field, in order to limit its scope to a specific topic, then obviously the first step in preparing the written course of study would be to determine subjects or titles for the units to be included. The following are examples of titles that were formulated to define topics about which elementary school units of art teaching might well be organized: A Study of Toys, Our Town, Life of the Ancient Egyptians, Beautiful Books, Transportation by Water, The Art of Japan. Some of the examples of titles suggested for secondary school units were as follows: American Painting, Problems of the Sculptor, Architecture, Craft, Advertising, Everyday Art.

After discussing the character of a unit of teaching, the investigators agreed that it should normally be made up of a number of clearly defined parts, all of which might be included in the diagram reproduced on page 83, which should help the teacher to organize the instructional material to be developed. The diagram, it was decided, should embrace information as well as activity, the information

SENIOR HIGH SCHOOL STUDENTS, AT WORK ON MURALS FOR THE ASSEMBLY ROOM, EXPRESS SOME OF THEIR FEEL-INGS TOWARD SCHOOL AND LIFE.



included heing hoth general and technical, in order to assure a broad cultural hackground. It was decided further that the activity growing out of the unit should he hoth directed and creative, in order to assure consistent pupil growth in the manipulative phases of the subject.

The Information Experience. It will be recognized that the general information to be included in any art teaching unit should be as closely related as possible to the specific topic around which the unit is to be organized. Such topics as the following refer to ideas that are general, since they do not specifically refer to art: geography, history, evolution, English, language, reading, spelling, writing, literature, music, arithmetic, science, health, nature study, current events, purpose, masters, consumer, patron, guidance.

The technical information should have to do with technique and with nesthetic considerations. Clues to what may constitute the technical information could be furnished by such topics as art form, line, mass, color, design, rhythm, balance, representation, lettering, construction, fitness, process, technique, medium, harmony.

The Activity Experience. Directed activity was found to imply activity which is not creative, its purpose being, nevertheless, to develop the particular and special skills that find fruition in the creative work of pupils. Clues to the characteristics of directed activity would be found in such words as dictation, tracing, copying, demonstration, criticism, control, drill, reading, and visiting (museums, libraries, factories, stores, and other places of interest and value).

Creative activity being activity which is not directed, clues to the meaning of creative activity would be found in such words as freedom, originality, experiment, imagination, inspiration, emotion, expression, interpretation, evaluation, appreciation.

PRELIMINARY ORGANIZATION

It was decided that preliminary organization outlines for the units of teaching could be prepared most effectively on diagrams arranged with vertical columns to contain the items relating to general and technical information, and to directed and creative activity. One diagram is for a primary grade unit on Toys, one for an intermediate grade unit on Japanese Art, and one for a junior high school unit on Architecture. They appear on pages 112, 114, and 172, respectively.

When an attempt was made to distribute the verbs and verb phrases appropriately over the four columns of the organization diagram, the futility of such an effort at once became apparent, for it was realized that most of the verb phrases could be placed in more than one of the columns, while some of the verbs, like aim and teach, would sometimes have to appear in all four of the columns. It was soon discovered, however, that the verbs and phrases could be used as needed later in the preparation of written statements descriptive of what the teacher might plan to do in carrying on the teaching unit. This is illustrated in the descriptions of units appearing on page 111 and page 171. A glance at these descriptions will reveal that each of the statements included has been made to begin with a verb, the form of the verb used being that of the second person imperative, which assures all the statements' being coordinate in form, although some of the statements will be found to refer to the teacher while others refer to the pupils.

Since teaching is concerned so largely with procedures, a description of any teaching process will of necessity involve the use of a verb. Consequently, the choice of a verb which will be most appropriate for conveying exactly the meaning intended is essential. A list of verbs and an index to their groupings will be found in the Appendix, pages 408 to 415 inclusive. The list will be helpful to teachers in the preparation of descriptions of units of teaching and in the writing of lesson plans, as well.

Even though a logical arrangement of the items of subject matter of units of teaching might be accomplished completely through the use of diagrams, it was felt that the narrative form of presentation is much better suited to the requirements of the mimeographed or printed course of study. The diagram should serve, then, merely as a means to the realization of the narrative form.

FINAL ORGANIZATION

The question then arose, how can the preliminary organization outline be used most effectively to accomplish the narrative form of presentation? Should its items be transferred from the diagram directly, though presented in statement form and arranged in paragraphs, or should the material developed on the diagram be rearranged in such a way as to meet the practical requirements of classroom procedure? It will be recalled that the order of presentation was found to conform with the following progressive sequence:

- 1. Orientation: getting squared away and ready for the new work at hand.
- Design: conceiving and planning the art products, regardless
 of whether or not a drawing is made in advance of the actual construction, design being interpreted to include decoration.

- 3. Forming Products: accomplishing the purpose of design, including the supplying of decoration, if decoration is to be present, and the application of necessary finishing processes, such as sand-papering, and of such materials as paint or stain.
- 4. Appreciation: judgment of the educational results, as well as evaluation of the entire art product or products turned out by the members of the class.

As in the case of the diagram employed in organizing instructional material for the elementary—or secondary—school art unit, it was decided that the use of the four sequential steps should not be apparent in the finished narrative descriptions appearing in the course of study, although the sequential arrangement should prove helpful in assembling the material and in arranging it in paragraphs. It was decided further that the material could be modified or climinated, and that new material could be added where this might seem desirable. To show how this can be done, the statements from the diagram for the unit on Toys and the unit on Architecture rearranged according to the sequential steps and presented in narrative form appear in full on pages 111 and 171, respectively.

QUESTIONS FOR DISCUSSION

- How do you think the social and economic background of children should influence their selection of a unit of teaching in art?
- 2. Why is the organization of educational experience into teaching units desirable?
- 3. What should a unit of teaching in art include?
- 4. What are the advantages to be gained in organizing units of teaching on specially prepared diagrams?
- 5. What relationship, if any, should exist in a teaching unit between information and activity? Between technical information and creative activity?

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- 6. What is the purpose of the general information? The directed activity?
- 7. Could there be a successful art teaching unit without both directed and creative activity? Why do you think both types are included in the diagram?
- 8. Give and describe the sequential stages of development of a unit of teaching in art.
- 9. Compare the outline form with the narrative form of presentation as applied to written descriptions of units of teaching.
- 10. Do you think it would be advisable to give each member of the class an outline of what is to be covered in a teaching unit, so that each pupil might proceed at his own rate of learning? Explain,

REFERENCES

AN INTRODUCTION TO ART EDUCATION

W. G. WHITFORD

D. Appleton-Century Company, Inc., New York, rev. and enl. ed., 1937 Professor Whitford of the University of Chicago has foreseen and interpreted varying problems encountered by teachers, as well as administrators, in both the small rural and the large city school. He discusses art needs in American life which should be influential factors in directing the curriculum in schools. Branching into many phases of the subject and viewing it from several angles, he has

THE TEACHING OF ART

M. E. MATHIAS

Charles Scribner's Sons, New York, 1932

The author strives to make the job of teaching easier by her tested suggestions for projects and by her evaluation of results. This volume was written for students preparing to teach. For the kindergarten and lower grades Mathias devises projcets in different mediums in The Reginnings of Art in the Public School (Charles Scribner's Sons, New York, 1924). In Art in the Elementary School (Charles Scribner's Sons, New York, 1929) she takes up other subject matter taught in the

ART IN ELEMENTARY EDUCATION

L. L. WINSLOW

McGraw-Hill Book Company, New York, 1942

Presents a plan for the inspiration and development of educative art experiences appropriate for the elementsry school as the foundation for a well-rounded art

THE ORGANIZATION OF INSTRUCTIONAL MATERIAL

program. Deals with the elementary school child and art, the art teacher, the unit of teaching in art, organization and sequence of instruction in art, procedures, visual aids, art mediums, and the course of study. An ample appendix sets forth examples of units of teaching and facilities for elementary school art.

CREATIVE EXPRESSION

Edited by Gertrude Hantman and Ann Shumaker

Reynal & Hitchcock, Inc., New York, 1932

Originally published as separate numbers of the magazine Progressive Education, this compilation is devoted to art, literature, music, and dramatics. Sixty-four pages are given to creative activity in art with 12 contributors presenting their methods or theories of teaching through spontaneous expression. The art section is generally illustrated with color plates and half tones and shows art work from the kindergarten through junior high school.

CHILD ART AND FRANZ CIZEK

WILHELM VIOLA

Reynal & Hitchcock, Inc., New York, 1936

To Cizek of Vienna belongs the honor of being a pioneer in the discovery of creative ability of children. He believes that each child should create freely from his own experience and that he should develop his own technique, though always with the help and guidance of the teacher. Dr. Viola explains the Cizek method of teaching in a 35-page introduction. The remainder of the book is given over to reproductions in color and in black and white of the work of Dr. Cizek's juvenile art classes.

PICTURE MAKING BY CHILDREN

R. R. TOULISSON

The Studio Publications, Inc., New York, 1931

Devoted largely to plates, this book gives an opportunity to compare the efforts of children of different countries and to discover wherein their creative impulses are the same. The pictures, well reproduced in color and in black and white, are not arranged according to any classification.

THE ART OF THE CHILD

A. G. Pelikan

The Bruce Publishing Company, Milwaukee, 1931

These examples of art work by children are arranged by grades from the first to the eighth. Commentary on the child's motive in his work, his joy in creating.

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and other explanatory analysis accompanies each illustration. The author, Director of Art in the Milwaukee Public Schools, believes that children should not create entirely from their own imagination, but that they should be shown examples of historic design and of art work which will influence them in their choice of subject matter and in their style.

CHILDREN'S COLOURED PAPER WORK

FRANZ CIZEK

G. E. Stechert & Company, New York, 1927

Cizek allows the pupil to select his own tools and materials. The only rule he observes strictly is that there shall be no rule in his classes. The illustrations, most of which are in color, are all reproductions of the work done in the young people's course of the Kunstgewerbeschule in Vienna.

CRAFTS FOR CHILDREN

R. R. TOMLINSON

The Studio Publications, Inc., New York, 1935

In this volume Tomlinson propounds some compelling arguments for the teaching of craftwork in schools. Slight discussions of the origin and development of the teaching of craftwork in various countries and illustrations similar in quality to those in the author's Picture Making by Children supply the remainder of the material.

Chapter V

Art in the Elementary Schools

INDENGARTEN children are individualistic in the sense that they are accustomed to think very little about the effect that their actions may have on other children or adults. In school life there must be a gradual growth from the individual effort of the kindergarten to the social effort of the primary and intermediate grades of the elementary school, and from the elementary school to the more highly organized individual and social effort of the secondary school period.

The first three grades of the elementary school are generally referred to as primary; the second three grades as intermediate. Children of primary grade level are imaginative and free in their netions, are very active and take great delight in manipulating unterials. At this stage, they are unusually impressionable and inquisitive and interdependent. Intermediate grade children are generally less imaginative and, therefore, more realistic; they are more self-conscious and critical of their own efforts and the efforts of others, more accurate and more discriminative, and generally more confident in their own mental ability, although extremely sensitive to difficulties—which may not to inhibit their performance.

If a child enters kindergarten at the age of five, he should be in the first grade at six, and in the second grade at the age of seven.

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Although the age-grade levels given below apply quite generally, it will, of course, be recognized that not all children will enter the kindergarten at five years of age; some may not attend kindergarten at all, but will enter school at the first-grade level, perhaps not until

AGE-GRADE SCALE
(The chronological age given is for the time at which the child enters the grade indicated.)

School levels	Chronological age	Grade levels
Primary	(5	Kindergarter
	} 6	First
]) 7	Second
Intermediate	8	Third
	(9	Fourth
	 10	Fifth
	11	Sixth
Junior high	12	Seventh
	3	Eighth
Senior high	14	Ninth
	15	Tenth
	12	Eleventh
	(17	Twelfth

the age of seven is reached. It should be understood, therefore, that the scale applies to normal age-grade placement in general. The agegrade scale should help the teacher better to understand the children with whom he works. If he knows the approximate age of his pupils,

CHILDREN OF PRIMARY-GRADE LEVEL ARE IMAGINATIVE AND FREE THEY ARE VERY ACTIVE AND TAKE GREAT DELIGHT IN MANIPULATING MATERIALS. Boy at Work in Painting Class for Children, Rhode Island School of Design, Providence, Rhode Island.



THE INTEGRATED SCHOOL ART PROGRAM

and other significant facts about them, his teaching problems will often be clarified and greatly facilitated.

GROWTH AND DEVELOPMENT

The child's emotional development is an aspect of his total growth pattern, and experimenting with materials makes a distinct contribution to his spiritual as well as mental growth. His sharing in the creative and appreciative art experiences of others results in the acquisition of socially desirable habits and attitudes. Beginning in the kindergarten and continuing through the sixth grade, art affords a logical culmination of activities that are vital and real to the child and is therefore an integrated component of the curriculum, in the pursuit of which he acquires an ever-increasing control and grows in his ability to recognize the possibilities of materials as means of expression.

Children of the first grade are imaginative, spontaneous, manipulative, and trusting. With all their interests centered in one topic for a time, and given many kinds of art materials with which to work, they will naturally create, construct, and appreciate. They will continue to develop aesthetically through being allowed to follow their own free choice. Important, too, is the first-grade child's reliance on an understanding of his creations by those adults closest to him, namely, his parents and his teachers.

If a second-grade child acquires meaningful information from various sources—some topic he has heard discussed, details in pictures he has seen, ideas gained from excursions to the country or to the neighborhood shopping district—such experiences will have vivid images in his impressionable mind. His feeling for art form is now expressed in a variety of ways; he not only works with clay or wood or paper pulp but finds bits of pasteboard, string, cloth, and other materials, which he brings to the classroom to work with. He now begins to express in his creative art the contour of objects, often with genuine artistic feeling for the things represented.

Third-grade children are able to make their creations still more concrete, and generally more realistic, too. Their construction is therefore made as practical and immediately useful as possible. In the building of houses to represent what children have learned about homes in foreign lands, the construction employed is generally crude when judged by adult standards, and there may be little evidence in it of the "proper" use of materials. There is, however, always some detail in which the tendency toward realism is forcefully apparent. The child now expresses assurance and satisfaction in being able to use effectively the various colors.

Imagination seems less active in fourth grade than at any of the preceding developmental levels. Here children begin to understand more fully the relationship of shapes and to acquire an expanding sense of proportion. The sense of proportion seems to develop suddenly in most fourth-grade children. Whereas heretofore they have been content with objects that are too small in relation to other objects in their pictures or constructions, now they become increasingly aware of the proportion and scale that are demanded by reality.

Fifth-grade children are still more critical artistically. They desire to be more accurate in their construction and more realistic in representation. Their taste becomes correspondingly more sensitive and discriminating. Design assumes far greater significance than it has before. This characteristic discrimination is often encouraged and as much time as possible given to the frequent evaluation of their work by the children themselves.

The sixth-grade child, having experienced the joy of handling many different kinds of materials and the acquisition of greater skill, and having participated in creative design in all of the preceding grades, becomes increasingly confident in his art expression. Though possibly less imaginative, he is now more fully aware of his difficulties as problems arise that require both skill and perseverance as well as artistic taste in their solution.

Throughout the elementary school period emphasis in art should be placed on originality of conception as made possible by the capacity of children at the various stages of their development to express themselves creatively. The challenge of art in living should furnish the major activation for most of the work undertaken, while the child's attitudes and feelings should be considered as of more importance than intellectual considerations. The specific goals sought should be organization as opposed to imitation; emotional fulfillment rather than realistic representation; awareness of rightness in place of the aequisition of facts of "correctness"; genuine esthetic expression, not more documentation

AIMS

Art is offered as a subject of study in the elementary grades because

- It provides opportunities for self-expression, thus helping children to learn more effectively.
- It is essential to their all-round individual and social growth, enlarging their educational horizon and enriching their lives.
- 3. It develops in them design consciousness, which enables them to improve their personal appearance, their homes, and their surroundings.

ART IN THE ELEMENTARY SCHOOLS

- 4. It discovers and nurtures in them art abilities which are of value to them in any productive work that they undertake.
- 5. It contributes generously to their intellectual, spiritual, and aestbetic culture.

The art course not only aims to stimulate expression but also helps the child to improve the manner in which he expresses himself. During his progress through the six elementary school grades he receives consistent training in color, representation, and design, all of which is made use of directly in creative handwork.

Because some experience with art is involved in every field of schoolwork, art helps the pupil to learn more effectively. To pursue it is, therefore, essential to his liberal education, on intellectual as well as on spiritual grounds; there is no history, no geography, no science, which is not intimately associated with the topics around which the art course is organized.

THE SELECTION OF UNITS OF TEACHING

The unit of work chosen to be carried on during any defiuite period of time should be selected on the basis of a number of considerations: It should, of course, be of interest to the class group and should be chosen by the children because of the interest manifested in it by them. Interest is perhaps the most important criterion of all. Without interest on the pupil's part nothing worth while can be accomplished in an educational way. The content of the unit should be within the children's range of ability and yet complex enough to require their full capacity to carry it to completion. The unit should provide for both individual and social growth. It should afford opportunity for genuine orienting, planning, executing, and evaluating; and it should accomplish the inculcation of desirable habits, attitudes,

appreciations, and skills. The unit should lead directly to experiences in other fields which may develop into units in those fields.

Conversely, a unit of teaching in art may originate in another subject-matter field of the curriculum, as during the English period. Under such conditions, the work in art should contribute to this end. Thus a school assembly, planned during the English period, might ultimately serve to tie up the work, not only in art and English, but also in geography, history, and science.

On the Basis of Information and Activity Experience. The unit should admit of selection on the basis of its representing a balanced body of experience in which information, as well as activity, can play an important part. The information experience included should be capable of tying up closely with that of the other curriculum fields, especially with geography, science, and history. Even though art has not up to this time been generally accepted as a social study, the subject-matter approach to art is much the same as in the case of geography and history. The amount of information experience included in the art unit should be sufficient to meet the access of the activities adequately.

The activities included should provide opportunities for the personal acquisition of skill and problem solving as well as for personal initiation, experimentation, and creative expression; they should also afford occasions for group cooperation and group endeavor. Activities

THE AMOUNT OF INFORMATION EXPERIENCE INCLUDED IN THE ART COURSE SHOULD BE SUFFICIENT TO MEET THE NEEDS OF THE ACTIVITIES ADEQUATELY. The Worlers, by a Fifth-grade Child, Public School No. 180, New York City.

with which the children cannot have first-hand experience should sometimes be stressed hecause of the educative values involved in vicarious experiences. The activities should parallel the information included in the unit, and the art products should be completed within the length of time devoted to the informational aspect of the unit.

SUBJECTS FOR ART UNITS

The integrated program which is being carried on in many progressive elementary schools at the present time makes possible a wide range of subjects about which units of teaching may be effectively organized. A list of suggested topics from which a selection can be made according to pupil interests and ability, and according to the place in the curriculum where the topics appear, should be made up by the teacher in advance of the actual planning of any particular unit.

The teacher should have clearly in mind at the outset the relationships that should exist in the curriculum between art and the other curriculum areas, such as social studies, English and handwriting, science, arithmetic, health and physical education, and music. He should also keep in mind the relationship of art and guidance at the elementary school level, for the talented child must by no means be left out of the picture.

A list of subjects suitable for elementary school art units might under varying requirements include such topics as the following, the grade-level placement being determined by the local curriculum organization. The list is not intended to be exhaustive, but it should be suggestive of the possible range of topics that are available for elementary school units of teaching.

TOPICS SUGGESTED FOR ELEMENTARY SCHOOL UNITS OF TEACHING

1. ART AND A SOCIAL TYPE

Russia

Scandinavian Countries

Holland

Switzerland

China

Japan Mexico

The Philippines

Italy

Spain

Great Britain

Hawaii Germany

France

America

2. Ant in Ancient Civilizations

Phoenicians

Egyptians

Hebrews

Greeks Romans

3. Ant in Relation to Holidays

Arbor Day

Easter

Memorial Day

Flag Day

Columbus Day

Halloween

Armistice Day

Thanksgiving

Christmas

Lincoln's Birthday

Washington's Birthday

St. Valentine's Day

Vacation Days

4. ART IN RELATION TO RECRE-

ATION

Hobbies

Athletie sports

Games

Gardening

Cinema

Daneing

Dramatics Marionettes

5. Ant in Relation to Occu-

PATIONS

Farmer

Salesman Teacher

Nurse

Physician Television Sailor Periodicals Fisherman Mails Motorman Signals

Factory Worker 9. ART IN RELATION TO UTILITIES

6. ART IN RELATION TO SAFETY

Police

Fire Protection Life Guard

Scouts

7. ART IN RELATION TO TRANS-PORTATION

Boats

Beasts of Burden Railroads

Airplanes

8. ART IN RELATION TO COM-MUNICATION

Telephone Telegraph

Radio

Clothing

The Home litensile.

Tools and Machines Light, Heat, and Power

10. ART IN RELATION TO CON-SERVATION OF NATURAL RE-

SOURCES

People Coal. Gas. and Oil

Forests

Iron and Other Metals

Minerals Soil

Water Wild Life

ILLUSTRATIVE MATERIAL

The teacher should have at hand illustrative material and suitable references adapted to the comprehension of children on such art processes as drawing, painting in water color and in oil, modeling in clay and casting in plaster of Paris, pottery, stenciling, batik, tiedand-dyed work, weaving, bookbinding, and woodworking, including

Illustrative material in the form of lantern slides is often helpful, not only in making processes clear, but also in furnishing a background for creative expression. One important reason for using lantern slides as an aid in teaching is that they help to supply the vicarious experience so necessary to creative expression in art; for not only do they help to make the visual aspects of subject matter clear, but they also furnish a background of reality for some art lessons which otherwise might be dull and uninteresting.

Best results are to be obtained by using a few carefully selected slides, the number shown depending upon the difficulty of the material presented, and on the interest and intelligence of the pupils. Slides should be selected that will fit in most closely with the unit of teaching in progress at the time when they are shown. They should illustrate as completely no possible the information to be taught, thus making the instruction both concrete and clear.

All slides should be labeled and, before the time set for the lesson in which they are to be used, they should be carefully arranged in the order of showing, preferably in n wooden box of appropriate size and shape. Each slide should be placed on edge in the box with its thumbmark up, at the right and to the back, ready for use. While being used, slide boxes should be placed close to the stereopticon machine, in order to avoid the risk of their being brushed off on the floor by the operator. Pictures should be kept on the screen for not more than n minute at a time, to avoid overheating and cracking the slides. While class discussion of the slides is in progress, the electric current may be slint off periodically if necessary. Only one person at a time should be allowed to operate the stereopticon machine.

Dust or finger marks on the slides or on the lenses of the stereopticon greatly reduce the clearness of the pictures to be shown, and it is, therefore, necessary to keep both lenses and slides clean. A moist cloth for dampening and a dry one for wiping will enable the teacher to keep this equipment in condition. When the tape which binds the pieces of glass together becomes worn, it should be replaced by new tape. When not in use, the stereopticon and slides should be kept covered and free from dust.

Educational exhibits, treated in Chap. VIII, should also play an important role in furnishing a hackground for creative work and thus inspiring it, as well as in affording an opportunity for showing the results of teaching.

COLOR REPRODUCTIONS OF DECORATIVE ART OBJECTS

The following group of color prints includes textiles and ceramics, and is available to teachers by courtesy of the Metropolitan Museum of Art, New York; The Pennsylvania Museum, Philadelphia; and The Chicago Art Institute. The size of each print is approximately 4 by 5 inches and the price is uniformly 5 cents each.1

Peruvian Vase (Puma Motif) Peruvian Tapestry (Cuttle-fish Motif) Peruvian Tapestry (Bird Motif) Peruvian Tapestry (Human Figure Motif)

Peruvian Tapestry (Warrior Motif) Navajo Indian Blanket (Geometric Motif)

Mono Indian Basket (California) (Geometric Motif)

Kern River Indian Basket (California) (Warrior Motif)

Pennsylvania German Pottery Jar (Rooster Motif)

Persian Tile (Ispahan, Persia) (Rabbit Motifi

Greek Corinthian Jar (Lion and Bird Motif)

German Dish (Frechen, Germany) (Stag Motif)

Persian Jar (Fish and Plant Motif) Asia Minor or Persian Tile (Decorative

Inscription) Persian Ewer (Plant Motif)

Persian Bottle (Bird and Plant Motif)

Chinese Incense Vase (Floral Motif) Bokhara Pitcher (Plant Motif)

¹The lot is reproduced through the courtesy of George C. Oakley of Art Education, Inc., New York City. See also late appearing on pages 163 to 167.

Mexican Majolica Talavera Ware (Floral Motif) Chinese Dish (Lotus and Fungus Motif) Chinese Dish (Conventionalized Lotus. Fungus, and Bird Motif) Turkish Mug (Floral Motif) Mohammedan Jar (Decoration in Lus-Egyptian Cup (Lotus Flower Motif) Indian Miniature (Prince on Elephant Motif) Athenian Lekythos (Departure of a Coptic Textile (Trellis Motif) Coptic Textile (Human Figure Motif) Warrior Mouif)

Chinese (Ming) Vasc (Lotus Flower Motif) Moroccan Embroidery (Peacock and Vase Motif) Persian Brocade (Floral Motif) Persian Brocade (Bird, Plant, and Animal Motif) Italian Brocade (Palmette Motif) Rhodian Plate (Ornamental Motif) Athenian Pyxis (The Judgment of Paris Motif

BLACK-AND-WHITE REPRODUCTIONS OF ARCHITECTURE AND DECORATIVE ART OBJECTS

The subjects that follow are from the Metropolitan Museum of Art, The Boston Art Museum, and the Pennsylvania Academy of Fine Arts.

COLONIAL ARCHITECTURE

Bennet-Boardman House. Saugus, Mass. John Alden House, Duxbury, Mass. Paul Revere House, Boston, Mass. House of Seven Gables, Salem, Mass. Hancock-Clarke House, Lexington, Mass. The Wayside Inn, Sudbury, Mass. The Craigie House, Cambridge, Mass. Emerson House, Concord, Mass. Cliveden, Germantown, Philadelphia, Pa. Fraunces Tavern, New York City Dyckman House, New York City

Washington's Headquarters.

burgh, N. Y.

Gunston Hall on the Potomac. Va. The Morris-Jumel Mansion, New York Westover on the James. Vn. Monticello, Charlottesville, Va. Pringle House, Charleston, S. C. Mt. Vernon, Fairfax County, Va. Arlington House, Arlington, Va. Woodbury Mansion, Portsmouth, N. II. Porch of Phelps House, Andover Hill, Mass. Porch of Bennet House, Wayland, Mass. Doorway of Col. Joseph Smith House,

Stonington, Conn.

Old North Church, Boston, Mass.

St. Peter's Church, Philadelphia, Pa. Bruton Parish Church, Williamsburg, Va.

Independence Hall, Philadelphia, Pa. Old State House, Boston, Mass.

COLONIAL INTERIORS

Kitchen from House at Topsfield, Mass. Parlor from Hart House, Ipswich, Mass. Living Room from House at Newington, Conn.

Living Room from House at Woodhury,

L. I. Room from House at Marmion, Va.

Room from Powel House, Philadelphia, Pa. Detail from Room in Powel House,

Philadelphia, Pa. Ballroom from Gadsby's Tavern, Alexandria, Va.

Room from House at Haverbill, Mass. American Empire Period, Metropolitan Museum, New York City

Fireplace in Cottage at Cape Cod, Mass.

Hallway in the Wayside Inn, Sudbury, Mass.

Taproom in the Wayside Inn, Sudbury, Mass.

Kitchen in the Wayside Inn, Sudhury, Mass.

Parlor in the Wayside Inn, Sudbury, Mass.

Bedroom in the Wayside Inn, Sudhury, Mass.

The Lafayette Coach at the Wayside Inn, Sudbury, Mass.

Garden view of the Wayside Inn, Sudbury, Mass.

COLONIAL FURNITURE

Slat-back or Ladder-back Chairs Wainscot Chair, Metropolitan Museum Group of Early American Furniture Banister-back and Splat-back Chairs Chest of Drawers Early American Press Cupboard Splat-back Armchair Desk Box on Frame and Table Gate-leg Tables Chair Table Butterfly Table Windsor Chairs Windsor Side Chair llighboy Dressing Table

Queen Anne-type Side Chair Queen Anne-type Wing Chair Georgian-type Side Chair Chippendale-type Ladder-back Armchair Mabogany Pier Tahle with Marhle Top Mahogany Pole Firescreen Hepplewhite-type Shield-hack bogany Side Chair Hepplewbite-type Shield-hack Arm-

chair Sheraton-type Side Chair

Tip-top Table Duncan Physe Table Sheraton-type Secretary

Mabogany Desk
Chippendale-type Side Chair
Secretary with Cabinet Top
Cbippendale-type Higbboy
Block-front Knee-hole Dressing Table
Block-front Desk
Sheraton-type Flap Table
Duncan Phyfe Dining Table
Chippendale-type Mirror
Three Looking Glasses
Wallpaper from Jobn Alden House
Pagoda Wallpaper
Pastoral Wallpaper
American Scenic Wallpaper
Toile de Jouv. Pastoral Pattern

Toile de Jouy, Allegorial Pattern

Bedspreads
Doorstep Hooked Rug
Hooked Rug

American Silk Damask Dress, 1775 Colonial Dolls

Colonial Dolls Stiegel Glassware Hardware

Lamps and Other Lighting Fixtures

"Paul Revere" Lanterns

Whale-oil Lamps

Bottle Coachmen, Bennington Pottery

Staffordsbire Pottery Paul Revere Coffee Pot Paul Revere Tankard Group of Early Pewter

Banjo Clock

THE PREPARATION OF ORGANIZATION OUTLINES

"Pupil participation in plnnning courses is," ns pointed out by Gearhart, 1 "basic to the modern philosophy of learning. In nrt classes there is individual expression through manipulation and also individual expression through observation and discussion. Discussion in art periods is a creative activity. Through discussion, students' reactions to art tendencies in environment and personal experience are discovered. In this work of socializing the pupil, programs are built whereby within the limits of the situation every child comes in contact with art."

In planning the unit of teaching, it will be recalled, a balanced organization outline should include both information experience and netivity experience, and a balance should also be observed between the general and technical aspects of information experience on the one hand and of directed and creative netivity experience on the other.

¹ Gearhart, May, "Experience in the Arts," contained in Your Children and Their Schools, a publication of the Board of Education of the City of Los Angeles, Cald., 1938.

It will be recalled further that, although general information is nontechnical, the general information experience to be provided in any art teaching unit should he as closely related as possible to the art interests around which the unit is organized; that the technical information should have to do with technique and with aesthetic considerations; that directed activity implies activity which is not creative, its purpose being nevertheless to develop those particular skills which will find fruition in creative expression; that creative activity is activity that is not directed.

The organization outline for a unit of teaching appropriate for a primary grade is presented on page 112. The diagram is followed by a description of the unit arranged in sequential order, such as might be used in the mimeographed or printed course of study.

PROCEDURES

The teacher puts the classroom in readiness for the work at hand. This is sometimes referred to as "setting the stage." It includes not only the adjustment of the physical environment or the arrangement of articles of the necessary equipment and apparatus, but also the adjustment of the mental and spiritual environments. Thus previous experience gained from contact through reading, through visiting places, through motion pictures, lantern slides, prints, exhibits, may appropriately be referred to. Each lesson may well have its brief orientation period to help the class to get started.

All that has to do with pupil planning in connection with the unit may logically be considered as design. Thus purposeful class discussion—the consideration of materials needed and of the processes necessary to be carried out, consideration of the size, shape, finish of the products, consideration of themes as well as mediums—all such

discussion, no less than the making of plans in the form of drawings or designs, comes within the range of the design stage. To design, then, is to plan the creative work involved in connection with an entire unit. Design is, therefore, an intellectual and spiritual as well as a manipulative enterprise.

The art products undertaken by pupils in connection with n unit of experience should he the result of definite planning. While the activities are in progress, the teacher should be ready to offer comments, help, and commendation, as the occasion requires. He should endeavor to hold each child to the highest technique and aesthetic standards that he set for himself during the design stage of the unit. The class should acquire considerable information experience during this stage of the unit.

As the art products develop, the entire group should be called together occasionally to report on the progress made and to size up their products in their unfinished condition, with a view to clearing up difficulties. A good time for such discussion is at the end of the class period. There should also be a general appreciation period as the final stage in the completion of the entire unit is reached.

DESCRIPTION OF A UNIT ON TOYS, USED IN A PRIMARY GRADE

Play on the piano or the phonograph the murch from the "Nutcrneker Suite" by Tschnikovsky, and "The Dancing Doll" by Poldini. Ask children what toys they thought of while the music was playing. Write n list on the blackboard of the toys suggested. Show pictures of children and toys, such as With Grandmn, by MucEwen, and Children of the Sea, by Israels. Read the poem. "The Gingham Dog and the Calico Cut." Discuss how toys as miniatures of things

INTERMEDIATE GRADE ART UNIT TOPIC: JAPANESE ART

Information.		Activity	
General .	Technical	Directed	Creative
Library as a source of information	Characteristics of Japa- nese pictures: No shad- nws, important objects	tion, and care of ma-	Block prints and printed products
Industry as produc- tive work Industries of Japan agriculture, stock	memory rather from model, faces three	Procedures to be follow- ed in designing and forming of products	A screen with painted decorations
raising, fishing, min ing, transportation manufacturing	lines in ink, light color neat, orderly arrange ment Raw materials of indu	Exhibit of Japanese books and other are products in the class	1 02, 20
Art industry, concer ed with the produ tion of works of a	c- entre	Visit to the art museum	
Art industries; po tery, porcelain, to tiles, furnitus mata, clothing,	re. How printing is do re, with wood blocks pa- Fine relationships of I	brary to see books an	
per articles, larq products, wood ivory currings		res. Report on assigne acts topics	Exhibit of children's work in school museum
Names of Japa artists' Utam Hiroshige, Hok Kanisada, Te Shunsho, Toyo	nese form of stencils, use are, decoration of flat usai, laces	din Excursion to importe sur- shop, department store or five search-ter-	re, ent Critique of products, of

Diggan to Show How Content Items May Be Organized for an Intermediate Grade

construct in his own mind a definite plan before undertaking to give the instruction, even though the plan may not have been written out in detail in advance. It is scarcely necessary to point out, however, that students in training to become teachers, as well as beginning teachers, will find it to their advantage to write out their plans for lessons in considerable detail in advance and to follow them persistently in carrying on the instruction in their classes.

A teacher who has carefully worked out an organization outline for a particular unit of teaching should find the preparation of plans for the individual lessons involved a comparatively simple task, as the organization outline will suggest precisely the instructional material required for developing the individual lessons.

A series of outlines is included at this point to illustrate what a satisfactory sequence of lessons and the lesson plans necessary for carrying them out should be like. The outlines that follow were prepared and used by teachers. Plans similar to these in form but adapted in subject matter and method to the abilities of pupils may be developed in a similar manner to meet the needs of art classes at any elementary school level.

JAPANESE ART

A UNIT OF TEACHING FOR AN UPPER ELEMENTARY SCHOOL GRADE

(For organization diagram of this unit sec page 114) STAGES OF DEVELOPMENT

1. ORIENTATION STAGE Lesson I. Learning about the Japanese people and their art expression

2. Design Stage

Lesson II. Thinking about and planning things to do Lesson III. Continuation of creative design

Lesson IV. Review of things learned about processes Lesson V. Deciding about colors to be used in decoration

Lesson VI. More experiences with color

3. FORMING PRODUCTS STAGE

Lesson VII. Carrying out the designs in materials

Lesson VIII. Continuing the constructive activities

Lesson IX. Finishing the products

4. APPRECIATION STAGE

Lesson X. Evaluating the results

1. ORIENTATION STAGE

LESSON I. LEARNING ABOUT THE JAPANESE PEOPLE AND THEIR ART

Previous work accomplished in other subjects:

Library

Information on general character of Japanese pictures, Report on Hokusai, Report on making Japanese prints, Report on Hiroshige

Geography

Definition of industry. Definition of art industry. Custom of carrying parcels in handkerchiefs

Auditorium

Oral reports to other section. Habits—audience, making reports.

Spelling or reading. To recognize and know meaning of the following words:

(Write on blackboard)

Characteristics

Representative (of a country)

Influence

Processes

Decorative

List of lantern slides

Hokusai—View of Fujiyama with Kanagawa Seen from High Wayes

Birds and Flowers

Utamaro-Servants Arranging Flowers

The Mountain Woman with the Strong Boy and the Strong Horse

Hiroshige-Ferryboat to Sumidagawa

Waterfall in the Province of Ysumi

View of Shore in the Rain, with Travelers

Exhibition of Japanese Paintings-Museum of Art

Industries

Agriculture, stock raising, fishing, mining, transportation, manufacturing (industrial art)

What is needed for manufacturing?

Skilled workers (art), waterways, power, raw materials, markets

Use of raw materials in the art industries

Clay, silk, bamboo, rice straw, lae, iron, cotton

Finished products

Pottery, porcelain, textiles, furniture, mats, elothing, paper articles such as parasols, fans, and lanterns, lacquer (fine polish for boxes and trays)

Write on blackboard:

Utamaro—Hiroshige—Hokusai—Kunisada—Yeisen—Shun-sho—Toyokuni

In geography you bave read and learned about the industries of Japan. Who can name a few of these industries? In the library you have been reading about some of the art industries of Japan. What do we mean by art industries? What are some of the important art industries of Japan? (Ivory carving, wood carving, wood-block printing, the making of pottery including porcelain.)

What are the general characteristics of the Japanese pictures? How do their paintings differ from those made by American artists? (Show a portrait by Yoritome and one by an American painterperhaps Gilbert Stuart's portrait of Washington, with which the children are familiar. Show a landscape by Hiroshige; also, one by George Bellows.)

General characteristics of Japanese pictures (List on blackboard):

No shadows

Not a complete representation of a scene

Important objects selected. Blank space made important part in design

Decorative effect always present

Painting from memory rather than from a model

Faces shown three-fourths front view

Outlines in ink

Light colors used

Neat appearance

Orderly arrangement of parts

What type of picture have we on the bulletin board? What name is given them? (Japanese prints.) Who can give a brief report telling us something about the way these prints are made? Who made

a block print of a ship last year? What does the Japanese artist do which is quite different from our method?

Here on the board are the names of some of the important Japanese artists who made these prints. (Japanese prints on bulletin boards with titles and names of artists written on cards under them.) How many children recognize any of these names? Which ones?

Hokusai Hiroshige Utamaro

Francis, will you tell us some of the interesting facts about Hokusai? Michael, will you tell us what you found out about Hiroshige? I have also some lantern slides of prints by Japanese artists. (Using list on board, have children point out characteristics as the slides are shown), as:

Hiroshige—Ferry boat to Sumidagawa (ink lines, neatness, details)

Utamaro—The Mountain Woman with the Strong Boy and the Strong Horse (No cast shadows or modeling)

There is another type of printing that the Japanese do—printing on textile material. (Printed cotton—design pattern, similar to that on pottery)

Does anyone know how the Japanese people use these scarves?

(They use them to carry things in.)

Of what art industry are these pieces of pottery examples? (Ceramics.) On one shelf we have some Japanese pottery; on the other, American pottery. Which is the Japanese? This is a piece of American pottery called Rookwood. How is it different from the pottery that we make in class?

Who could come over to the case and name some of the art industries represented? (Ivory carving, pottery, toymaking, weaving, emhroidery, etc.) Who could name some of the raw materials from Japan used in these products? (Silk, bamboo, straw, etc.)

There are a few real Japanese books here. This is a Japanese schoolbook. How is it different from ours? (Title on hack; reading begins at back.) This is an artist's sketchhook. Remember, we said that the artists study their subjects, then sketch from memory. This is a whole book of their sketches. Show book of Japanese fairy tales and also an example of Japanese type of binding done hy Americans. How many children would like to see these closer? Where could you use them where you would be able to see them better and where you would he sure to have clean hands? (Lihrary.)

There is still another kind of art work for which the Japanese are famous. In a great many pictures you will notice a folding screen. Most of these screens are heautifully decorated. I have a picture of one here for you to see. Where might we be likely to see a real Japanese screen? (Art museum.) There is a very lovely one in the museum of art. How many children think they might save up enough pennics for carfare so that we can go to see this screen?

Where else might we get information about the Japanese artists' work? (Public library, people, pictures.) (Bring in objects for exhibit.)

Let's pretend we are in a museum now, and walk around the room to see the art objects which we have here in the classroom. (Form groups to study products.)

(After children are back in places): When you learn more about the processes, how many children think it would be fun to see what

kind of artists we can be, and try to make some of these things? What could we make?

Block prints-for books, for wall hanging

Pottery-vases, figures

Paintings-for wall, for screen

What material would we need? (Write information on black-board.)

For block printing

Drawing paper

Tracing paper

Linoleum blocks

Linoleum cutting tools

Ink

(Discuss use of tools and processes for wood blocks.)

For pottery

Clay, clayworking boards, modeling tools, wet cloths

Cover boards, cover paper, cloth, cord, paper for livings, glue For painting

Ink, paper, paints

Raise your hand if you would like to try to make a block print; a book; a painting; a piece of pottery. The children who would like to cut blocks for prints, raise your hands again. John, you be group leader and choose 10 children for your group. (Do same for each group.)

What will everyone have to do before he can start using materials? What do the Japanese artists do before they start drawing? (Fix the scene in their minds first.) Try to plan in your mind what

you'll draw or make, and on Friday we shall discuss our plans and decide just what to do.

2. DESIGN STAGE

LESSON II. THINKING ABOUT AND PLANNING THINGS TO DO

Have children sit together in groups

Clay group-back right, near sink

Book group-front right

Painting group-front left

Block print group—back left, near workbench

The following materials will be on each individual table according to group needs:

Clay-too wet, too dry for use, boards

Poster paint, brushes, paper, pans

Linoleum blocks, tools

Materials for book

Let me see the hands of the children who have used before the materials you find on your tables. How many have never used these materials before? Would you like to try using them for a few minutes to see how they work? (While other three groups experiment, teacher names parts of book for book group, allowing children to guess the use of each.)

Stop class after 8 or 10 minutes.

Call on a few children to tell what they did. How many children learned something new about your material that he didn't know before? Has anyone any questions he would like to ask about his material?

(Have materials collected. One child in each group may collect all in one large box.) Monday, we saw a great many products of Japanese art. Then we decided to make some products of our own. What must we know before we can start? (Methods of work or processes.) Here are four kinds of clay products we might make. (This may be different according to what you did when you tried the materials. Show examples of figure, bowl made by coil method, modeled bowl, tile.) Will it be all right for us to use different methods for making our products? (Recall objects in display case.) How can we make our products look Japanese? (By their design, decoration.)

Who in the elay group would like to learn how to model an animal? Make a bowl? A vase? A tile? I have some information here for you that you may read and later report on to the elass.

Before we go to work there is one thing that all of us must do first, regardless of what we are making. We must plan or design our products.

Let us do as the Japanese have done: plan in our minds our finished work. (Allow sufficient time.) What was the first thing that came to your mind in thinking about your plan? (Shape and size of object.) Then what must be decided on? (What the pictures will be about.)

Japanese subjects—nature, landscape, figures. Some tell stories. Form of painting. Design.

Allow groups to plan what each member of the group will do. How many children think they have a good idea of how to make their products? What did we say we need first? (A design.)

Must have a story or subject for painting or block printing. (Give out papers for reports.)

Look at these scarves. One of these little patterns is called a

motif. The motif is a design unit. It also tells us what the design is about. (Write word motif on board.) Making a motif of a flower or leaf is really just simplifying the drawing. Instead of painting a flower, such as this (show picture), the designer sometimes draws each petal and the center of the flower separately, like this. (Show charts of hlossom, leaf, feather motifs.)

It may help you in making your design for the decoration to choose as your motif some little natural object. If you add leaves or buds and twine in some twigs or stems, you may soon have an attractive decoration of your own.

The children in the clay group might plan a motif to be repeated in a horder. The tile group, of course, must work in a square enclosing shape.

The children in the hook group might plan their decoration in a small circle, square, or triangle to go under the title of the hook.

Because the screen group have planned their designs and are ready to paint, what will they have to think ahout most? (Color.) What colors were used in the screen at the museum? (Gray, gold, silver.) If we use this idea for our screen, you may plan the colors for the figures when the other memhers of the class plan which colors they will use.

LESSON III. CONTINUATION OF DESIGN

Last Monday, after we saw some Japanese art products, we listed some of the materials that we should need in order to make products of our own. On Friday, we experimented with some of these materials. What are some of the things we found out? (Clay, if too wet, sticks to fingers; if too dry, it crumbles. Any other comments,

as perhaps: If you dig a tool too deeply into the linoleum it chips out pieces instead of cutting a clean line.)

What did we still need to learn before we could start making our products? (Methods or processes.) What did we do to find out? (Encourage children to report.) Could you tell briefly some of the methods you read about?

Why did we decide we might use some of our own methods along with some Japanese methods? (Found that the Japanese did the same thing.) (Recall seeing examples in the display case: Japanese box with decoration, etc. Have examples on shelf.)

The leader in each group tells the class the various products his group will make. (Call on group leaders.)

Clay group

Tiles, jars and bowls, figures. Processes of pressing, coil building, modeling

Bookbinding group

Two books:

- To keep all information we get about Japanese art industries
- 2. For Japanese stories and illustrations

Block print group

Prints of Japanese figures and landscapes

Painting group

A series of pictures for a sereen

What did we learn is the first step in planning these products? (To make good designs.) What makes a good design? Why was Hokusni a good designer? Was the maker of this piece of pottery a good designer? (Arrangement of lines, masses, and colors.) (Have

Have materials put back in boxes and returned by leader to front of room.

NOTE ON PROCESSES

Clayscorking. The clay should be about the consistency of putty. If it is too hard for modeling, mix it with softer clay or water; if too soft, allow it to stand in the open air a few hours. Clay should be of uniform consistency so that shrinkage will not he greater in some places than in others. To put the clay in proper condition, pinch a small amount of it between the fingers. Repeat this process until all the lumps are removed and no clay sticks to the fingers. Divide the ball of clay into two parts, and press one piece on top of the other, in your hand or on a work hoard. Repeat this operation, which is called wedging, to force all the air bubbles out of the clay. To determine whether all the bubbles are out, cut the clay in two with a piece of wire stretched taut. If all the bubbles are not out, tiny holes will show on the cut surface. Press the cut pieces back into a solid mass and continue the operation.

Clay Tile. Place the clay on a piece of paper or on a damp cloth over a work hoard on the table. Place a wooden frame over it and roll the clay until its surface is level with the frame. Allow it to dry slowly. The frame will slip off easily when the clay dries. Paint on a design for the decoration. (If the tile is to be fired, use glaze for painting.)

Animal Paper Weight. Shape the clay into a lump proportionate to your design. Place the lump of clay on the work hoard. Work in the hands with the tool and fingers. If it is not completed in one day, cover the work with a wet cloth and, if possible, keep it is a covered crock or can or in a metal cupboard. When modeline has heen completed, allow the work to dry slowly, to prevent its cracking. Do not allow work to be in a draft while drying

Bord (Thumb Problem). Use clay which is not so soft that it sticks to the fingers. Form the clay into a ball and place it on the work board. Place the fingers around the clay, the thumbs resting on top of the ball. Force the thumbs about balfway into the clay ball. Gradually work down and force the clay out, forming a howl to conform to your design. Round all the sharp edges slightly for the glaze will adhere only to a rounded edge. The walls should be of uniform thickness; otherwise, the bawl might break when fired. If the bowl will not lift off the board, cut it off at the base with a piece of fine wire. Invert the bowl and lower the center portion for marking it with your name.

Bowl (Coil Method). Use clay which is not so soft as to stick to your fingers, Take off a small lump of clay and roll it into a ropelike coil. In rolling the clay, use the fingers and palms of the hands. Roll until a coil about 34 incb in diameter and 10 inches in length is obtained. The coils should he of uniform thickness, Place one end of coil on the center of the board and press it down to the board. Wind the clay coil around on itself until a disk is formed the size of the base of the howl. While the hase is being made, the coil should be pressed firmly on the board, and pressed, or welded, against itself. Finish the hottom of the bowl before starting to build the side walls. When a new coil is needed, put the two ends together, one on top of the other, and weld by pressing and slightly tapping the new coil into place. Turn the board around continually as you work. Build up the side walls by pressing each new coil firmly onto the one below. This should be done very carefully, to prevent air bubbles from forming hetween the coils, which would later cause cracking or breaking. Direct the placing of coils according to your design. If an incurve is desired, let the coil overlap a little on the inside. If an outcurve is desired, let the coil overlap a little on the outside. Use a wire tool or a piece of tin to true up the shape on both the inside and the outside. Make the walls of an even thickness, to assure uniform shrinking in drying. Finish the brim of the bowl hy rounding the sharp edges. Practice making a bowl on the potter's wheel.

LESSON IV. REVIEW OF INFORMATION LEARNED ABOUT PROCESSES

Clay group. Have each child tell what he has planned to make, and describe the processes to be used. Coil group, how to true the base of bowl. Remind children they must work to their own designs. Figure group, how to model the figure. Have children work clay for 2 or 3 minutes, then start problem in the next lesson. At end of period, tiles should be finished; bowls should be about half finished. Work must be wrapped in wet cloth and put on shelf. Tiles to be left out to dry.

Book group. Finish cutting parts. Fold pages. Paste hinges and put work in press. Mark lines on cover paper as guide when pasting. Mark the covers to be mitered. Recall how cover and lining papers were put on; how to wrap in paper and put in press. Divide group, four children to each book—two in each group to paste, two to punch holes in pages. Decide to use cord to fasten pages together. (It is strong and durable.)

Painting group. Decide on making large, rather than small, figures to fit purpose, so screen can be seen from stage in auditorium. How to make screen. To use drawing boards. To use crayons instead of pencils for drawing. To paint the frame. To make large figures in the screen panels such as: The first, a man sitting on the floor painting; the second, a woman hanging a picture, standing; the third, a woman standing, carrying trays of silk. To make smaller figures leading up to center, for the two side panels of screen. Seated figures. A man making pottery; a woman weaving.

Block printing group. Discuss trees, hills, boats, and other things likely to be included. Show lineleum block.

LESSON V. DECIDING ABOUT THE COLORS TO USE IN DECORATION

Continuation of preceding lesson.

Discussion. How to make colors light and dark, vivid and dull.

Each member of the clay group to write on a slip of paper the names of colors he planned to use.

Groups continue the work in design.

LESSON VI. MORE EXPERIENCES WITH COLOR

Last time, we talked about the colors we might use for our Japanese decorations, and how to mix them. What did we find we had

> IT IS THROUGH THE EXERCISE OF ONE'S SENSE OF DIS-CRIMINATION THAT TASTE IMPROVES AND GROWS. Linoleum Block Being Cut by Dick Harrison and Dick Davies, Pupils of Eighth Grade at the Bryant School, Scattle, Washington.

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to do with the paint before we could use it on the screen, Francis? (Dull and lighten it.) How did we lighten it? (Added white.) How did we dull it? (Added its complement.) If you can't remember which colors dull one another, how can you find out? (Find out which color is opposite it in the color circle.) Henry, which color did you use to dull the blue for your painting? (Orange.) (Show on circle.)

Why did you decide it was all right not to use the natural colors of birds and flowers for our pottery decorations, Josephine? (I didn't draw natural-looking flowers and birds hecause I wanted my picture to he a hetter decoration than that. I designed shapes to fill the space nicely.)

What made you think that different kinds of purple, such as purple-blue and red-purple, would be good for your tile, Virginia? (I saw they were related, or next to one another in the color circle.)

Try to make your design on a piece of paper about the size you will need for your finished decoration. Draw the shape you want first, then try to fill the space nicely with your pattern of birds, flowers, trees, or whatever you have in mind.

(At end of lesson have children show designs.) Block print group, hold up board with pattern on it. Who has an especially good design for a decoration? What must we still plan tomorrow before we can apply our decorations to our products? (Plan the eolors.)

(Collect materials.)

3. FORMING PRODUCTS STAGE

LESSON VII. CARRYING OUT THE DESIGNS IN MATERIALS

Have group leaders get boxes as they come into the room, and give out materials immediately. Give class 5 minutes to get materials organized. Call class to order. Ask if there is anyone who needs special

help. If not, let class start work. If only one or two groups need help, allow others to start. Work with these groups. Allow class to ask and answer questions.

Let us decide how much work should be accomplished in this lesson. (When half of period has transpired, help children to judge whether or not they are working fast enough to accomplish what they intended to for the day.)

Discussion at close of period: What will you need before you can go on?

Painting group. Materials ready, frame to paint, rods to put in frame of screen.

Book group. To know how to put in pages. Cover decoration.

Print group. Nothing more.

Clay group. Nothing.

LESSON VIII. CONTINUING THE CONSTRUCTION ACTIVITIES

Continue the work, giving special attention to book and screen groups.

Has everyone the colors he planned to use?

Is there anyone who does not know what to do? Then everyone work real hard and see if you can finish your products today. (Pupils go to work.)

How many children have finished painting? (Have a few at a time put their products on the shelf or in the display cabinet; screen and prints in front of room.)

Continue work and close lesson in the usual way.

LESSON IX. FINISHING THE PRODUCTS

(Have children's finished and partly finished work out of cabinet, where it can be seen.)

Now that most of our products have been made according to our designs, what is our next step toward finishing them? (Completing the work and putting on the decoration, if there is to be decoration.)

There is one way the Japanese put on their decorations that you should know about: they cut their patterns out of paper and painted through the holes in the paper. These are called stencils. (Write word on board. Show Japanese stencils.)

Why do the Japanese use stencils? (Can be used more than once. Not so likely to spoil material when the worker cannot erase.) Could you hold a stencil over a vase form very well and paint through it? (No.) Which group might find a stencil helpful in their work? (Book group.)

Continue work until all products have been finished, including the decoration.

4. APPRECIATION STAGE

LESSON X. EVALUATING THE RESULTS

We said a few weeks ago that we would see what kind of Japanese artists we would make. We should be able to decide that today. First, who can tell us what art industries are carried on in Japan? (Printing, painting, pottery, metalwork, weaving, carving, papermaking, etc.)

Did we make good Japanese products? Now, who remembers some of the characteristics of Japanese painting? (List on board.)

No shadows

Not a complete representation of a scene Important objects only selected; blank space important Effect decorative; appearance neat

Painting from memory
Faces, three-fourths view
Outlines in ink. Light, weak, colors used
Parts, arranged in an orderly way

Look at our Japanese work now and see if you can find any of these characteristics present. Where has nature been used for a subject? (Birds used by Virginia, flowers by Felix, etc.) Did you see any evidences of three-fourths-view faces? (Screen.) Did anyone paint shadows? (No.) Did anyone make good use of blank space as part of design? (Edward's block: birds and flowers.) Light colors? (All.)

We should use what we know about design in criticizing the products we have made. I will write on the blackboard some of the things I am sure we all know.

Arrangement of lines should be pleasing.

Arrangement of masses should be pleasing.

Color should be just right.

There should be beautiful balance.

Products should fit the purpose for which they were intended.

Products should fit the purpose for which they were intended.

The things made by each group are in turn brought to the front of the room and held for all members of the class to see.

Clay products Books Block prints Paintings

Products are discussed by the class. What do you think about the color used by John in his bowl? (I think the colors are good because they are neither too dark nor too light.) What can you say about the strength of these colors, Helen? (The colors are neither too strong nor too weak.) Are the lines pleasing, Henry? (Yes, I like them because they make the bowl look like a bowl that should be good and useful.) Are the lines of the bowl beautiful to you, Anne? (Yes, they are like something heautiful growing.) How many children think the decoration well halanced? Will you tell why, George?

Similar discussion for books, block prints, and paintings.

QUESTIONS ON PROCEDURES FOLLOWED IN THE LESSONS

The following questions on procedures were used by teachers in carrying on a discussion of the lessons outlined and which were observed by them. They will indicate which phases of procedure were regarded by these teachers as sufficiently important to he considered.

LESSON I

- 1. How was the first lesson made to grow out of other school experience? Library? Geography? Auditorium? Reading?
- 2. How was interest shifted from geography to art and concentrated in the art industries of Japan?
 - 3. What means were used to relate the arts of Japan to those of America? Why was the portrait of Washington chosen as an example?
 - 4. How did the teacher create a receptive mood for the appreciation of Japanese art products? How did she present the objects to be appreciated?
 - 5. Note how the groups were selected. What basis was used for the grouping?
 - 6. To what extent did the pupils grow in appreciation during the lesson?

LESSON II

- 7. How was the class prepared to go to work in the second lesson? Why was it thought desirable for the pupils to experiment with materials during the preceding class period? Where land the pupils secured the information necessary to enable them to begin work immediately following the introductory discussion?
- 8. What are the values of the discussion period? What proportion of time was given to introductory discussion? To design activities? To concluding discussion? To what extent is this proportioning of time indicative of what the general practice should be? Is it always necessary to have two discussion periods in a lesson?
- 9. What was the relative emphasis given to group work, as distinct from individual work? Should the assignment of emphasis employed in this lesson be regarded as typical of the most satisfactory practice? Why?
 - 10. What can be said for the work habits of the class?

Of the clay group?

Of the book group?

Of the painting group?

Of the block print group?

- 11. How was the class guided to an understanding of the part that a designer plays in the making of art products?
- 12. What growth, if any, did you note in the pupils as designers, in their ability to conceive of and to plan their art products?
- 13. How was the class made conscious of the importance of knowing about design?

14. How was it possible for the pupils to accomplish what they did in the time allowed for creative work? When was teacher guidance employed? How was it employed? To what extent were pupils left free to work things out for themselves?

LESSON III

15. Why was not the lesson introduced with a discussion period?

16. By whom was the amount of work to be accomplished during the period determined? Painting group? Bookmaking group? Block printing group? Clayworking group?

LESSON IV

17. To what extent did the pupils in forming products acquire control over materials and attain facility of expression?

The processes engaged in by pupils to be noted, according to the following points:

- a. Use made of designs developed in class last week
- b. Sharing as a productive member of a group
- c. Embodiment of individual ideas
- d. Appropriateness of materials and products
- e. Economy of time
- f. Observance of safety first

LESSON V

18. What was the value of making preliminary designs for the pictures for the screen and block prints, before working up full size?

19. By what means was the attention of the entire class secured by the teacher when necessary? What other methods can you suggest that might be as satisfactory?

LESSON VI

20. How did this lesson differ from the preceding lesson? How did the discussion period of this lesson differ from the discussion period of last week? What part did the teacher play in the discussion?

LESSONS VII, VIII, AND IX

21. How was the seventh lesson introduced? What did each of the groups decide would be necessary in order to finish its products?

> Painting group Bookmaking group Block printing group Clayworking group

- 22. What method did the teacher use in developing a concept of decoration? Can you suggest another method that might have been used?
- 23. Every unit of work in nrt should include some information and expression. What evidence, if any, was there that both of these elements were present in this lesson?

Lesson X

- 24. How was the assignment for the next lesson given?
- 25. How was the lesson concluded? Note how the work of the class was displayed for criticism. Why was the work displayed for criticism?
- 26. Note how the lesson was introduced. How do you account for including the discussion of color?

- 27. Compare this lesson with the lesson of last week with respect
 to
 - a. Subject matter
 - b. Pupil experience
 - c. Methods employed by the teacher
- 28. To what extent was the assignment set up in the lesson of last week realized?
- 29. In thinking back over the cycle of lessons, what evidences of pupil growth did you observe? In understanding the Japanese artist? In working and sharing as productive members of a group?

QUESTIONS FOR DISCUSSION

- 1. How would you proceed to arrange a sequence of lessons in art in an elementary school using the preliminary diagram outline?
- 2. What would be your procedure in planning the individual lessons?
- 3. In practice do you think it would be advisable to arrange the entire sequence of lessons and to write out all the lesson plans in advance of actually undertaking the carrying on of an elementary school unit of teaching? Explain.
- 4. To what extent do you think the teacher should feel obliged to follow the plans made in advance?
- 5. In planning units of teaching how would you guard against overemphasizing the information at the expense of the activity phase of the subject?
- 6. How would you proceed to organize and develop an elementary course of study in art for a public school system?

REFERENCES

BOOKS FOR THE CHILD'S USE1

Ackley, E. F., Paper Dolls; Their History and How to Make Them, Frederick A. Stokes Company, New York, 1939.

¹This list of looks suitable for elementary school libraries was prepared by the Director of Work with Children, The Enoch Pratt Free Library of Baltimore.

- Bailey, C. S., Children of the Handcrafts, The Viking Press, Inc., New York, 1935. Bell, Enid, Tin-craft as a Hobby, Harper & Brothers, New York, 1935.
- Berry, Ana, Art for Children, Albert & Charles Boni, Inc., New York, 1934.
- Brown, Paul, Black and White, Charles Scribner's Sons, New York, 1939.
- Bruce, Marjorie, Book of Craftsmen, Dodd, Mead & Company, Inc., New York, 1937.
- Bryant, L. M., Children's Book of Celebrated Sculpture, Appleton-Century-Crofts, Inc., New York, 1923.
- Chandler, A. C., A Voyage to Treasure Land, Harper & Brothers, New York, 1939.
- Chandler, A. C., Treasure Trails in Art, E. M. Hale & Company, Publishers, Eau Claire, Wis., 1937.
- Conway, A. E., Book of Art for Young People, The Macmillan Company, New York, 1941.
- Deucher, Sibyl, Giotto Tended the Sheep, E. P. Dutton & Co., Inc., New York, 1938.
- Deutcher, Sibyl, Millet Tilled the Soil, E. P. Dutton & Co., Inc., New York, 1939.
 E-Yeh-Shurc, I Am a Pueblo Indian Girl, William Morrow & Company, Inc., New York, 1939.
- Fish, H. D., Doll House Book, Frederick A. Stokes Company, New York, 1940. Furniss, Dorothy, Drawing for Beginners, Bridgman Publishers, Pelham, New York, 1932.
- Gaba, Lester, On Soap Sculpture, Henry Holt and Company, Inc., New York, 1935.
- Gibson, Katharine, The Goldsmith of Florence, The Macmillan Company, New York, 1929.
- Hamilton, E. T., Handicraft for Girls, Dodd, Mead & Company, Inc., New York, 1932.
- Hamilton, E. T., Popular Crafts for Boys, Dodd, Mead & Company, Inc., New York, 1935.
- Hillyer, V. M., and E. G. Huey, A Child's History of Art, D. Appleton-Century
- Company, Inc., New York, 1933. Holme, Geoffrey, Children's 1rt Book, The Studio Publications, Inc., New York,
- 1937.
 Hinnore, York, Pottery Making from the Ground Up, The Viking Press, Inc., New
- York, 1941. Jurdan, N. R., American Costume Dolls; How to Make and Dress Them, Harcourt, Brace & Company, Inc., New York, 1941.

- Lamprey, Louise, The Story of Weaving, Frederick A. Stokes Company, New York, 1939.
- Langdon, W. C., Everyday Things in American Life, 1607-1776, Charles Scribner's Sons, New York, 1937. Leeming. Joseph, Fun with Paper, Frederick A. Stokes Company, New York,
- Lutz, E. G., What to Draw and How to Draw It, Dodd, Mead & Company, Inc., New York, 1914.
- McMurtrie, D. C., Wings for Words; The Story of Johann Gutenberg and His Invention of Printing, Rand McNally & Company, Chicago, 1949.
- Naramore, Elizabeth, William and His Friends, The Viking Press, Inc., New York, 1936.
- Perry, E. K., Art Adventures with Discarded Materials, Noble & Noble, Publishers, Inc., New York, 1933.
- Robinson, E. F., and T. P. Robinson, Houses in America, The Viking Press, Inc., New York, 1936.
- Rogers, Frances, Big Miss Liberty, Frederick A. Stokes Company, New York, 1936.
- Smith, Susan, Made in America, Alfred A. Knopf, Inc., New York, 1929.
- Smith, Susan, Made in France, Alfred A. Knopf, Inc., New York, 1931.
- Smith, Susan, Made in Mexico, Alfred A. Knopf, Inc., New York, 1930.
- Steedman, Amy, Stories of the Painters, Thomas Nelson & Sons, New York, 1938. Van Loon, H. W., The Arts, Garden City Publishing Company, Inc., Garden City, New York, 1937.
- Wheeler, I. W., Playing with Clay, The Macmillan Company, New York, 1927. White, A. T., Last Words; Adventures in Archaeology, Random House, New York,
- White, W. C., Made in Russia, Alfred A. Knopf, Inc., New York, 1932. Whitford, W. G., Art Stories (series 3V), Scott, Foresman & Company, Chicago,
- Wilhelm, L. M., With Scissors and Paste, The Macmillan Company, New York,

Chapter VI

The Junior High School Program

ost people are convinced that a division of the school system into three parts—elementary, junior high, and senior high—is superior to the older twofold division into elementary and secondary schools, and are committed to the newer type of organization commonly referred to as the six-three-three plan. According to this plan the first three grades of the secondary school period constitute the junior high school, the second three, the senior high school.

GENERAL CHARACTERISTICS

The junior high school serves as n transitional organization between the elementary school and the senior high school.

In the junior high school, which term will be used in this book to refer to the seventh, eighth, and ninth grades, individual and social effort on the part of boys and girls may be more highly organized than was true at the elementary school level. Because of its differentiated program the junior high school should be able to appeal even more strongly to the individual differences and needs of its pupils. It should be able to interest them at a period which is generally regarded as critical in their physical and mental growth.

Some of the cluhs may give their major emphasis to photography, others to sculpture, painting, sketching, or craft; all will be engaged either in making closer contacts with the interests represented by other school subjects, through cooperating with other departments and cluhs within the school, or they will connect more closely with life experiences outside, through trips to art galleries, to the art school, to huildings that are architecturally heautiful, to buildings in process of erection; to monuments and other works of sculpture in and near the community; to the studios of sculptors, painters, and craftsmen; to manufacturing plants where beautiful things are being produced, to printing offices which do artistic work, and to department stores where products of artistic merit are offered for sale.

Art clubs help to raise the standard of taste within the school community by securing speakers on art subjects, as well as gifts and loans of works of art, and by purchasing framed pictures for school decoration, as well as illustrative material for use of the club and of the Art Department. Clubs should also he active in producing work for school publications, and in arranging exhibitions and social functions to which the faculty and student body are invited. Since what counts in art, as in other things, is not so much what one knows as how well one can use what one knows, some organized form of outlet for the art impulse outside of the curriculum would seem desirable in all the schools. So it is that, in most schools, we find art clubs which aim in a general way to look after the art interests of the school community.

"In order to realize how extensively art really influences our daily life," writes Glace, "one needs but to glance through the daily

¹ Glace, M. F. S., "Individual Development through Art Education," Peabody Journal of Education, Vol. 12, September, 1934.

newspaper. Aside from the news items of particular interest to the archeologist, the art historian or the collector, we find also advertisements appealing to the prospective purchaser's discrimination, based on a knowledge of color, line, form, design, in the selection of clothing, furniture, automobiles, and various other necessities of life. Offering merchandise in an 'attractive new package' is a favorite line with copy writers. The building page contains articles describing the practical functional form of modern architecture or the mural decorations being painted in some public building. The Woman's Page gives varied advice, how to plant the garden to make it appear attractive: how to arrange flowers harmoniously and pleasingly; how to make the home restful through proper selection of furnishings; how to choose accessories which harmonize with certain costumes; what types of dresses are suitable for different figures; as well as beauty aids concerning the color harmonies underlying inoffensive make-up. Elsewhere we find notices and critical appraisals of the current exhibits at art galleries and museums; the itinerary for the automobile tourist through regions of natural beauty; the cartoon satirizing the mercenary nation which permits the erection of unsightly billboards and hot dog stands which deface the landscape; the editorial decrying the lack of aesthetics of picnickers who leave a littered spot for the next fellow. An endless list, that of art in everyday life."

AIMS

The aims of art teaching in the junior high school, addressed to the pupil himself, may be stated briefly as follows:

WAYS IN WHICH ART WILL HELP YOU

 Some knowledge and appreciation of art is necessary in nearly every field of work. Art will help you to live more effectively. Chief among the claims for the junior high school organization are that it keeps children in school longer, that it gives them an enriched educational offering, that it enables them to explore a greater number of fields of human endeavor, offering them more in the way of educational and vocational guidance than was possible under the old order, that it is more flexible in its curriculum schedule, that it places pupils in a more desirable atmosphere in which school subjects may be taught under better conditions by teachers who have heen more highly trained in the subjects that they offer, that the organization is more economical of the pupil's time, and that it promotes socialization, at the same time throwing more responsibility on the individual pupil.

Junior high schools sometimes make provision for election of studies by the pupils, and in some junior high schools promotion is by subject. In most of them today pupils are generally grouped according to ability. The socialized recitation prevails, and special talent in the various curriculum areas is more often discovered and nurtured.

Pupils in the junior high school should be given a continuous opportunity to use their knowledge of art in school enterprises connected with the issuing of periodicals and other publications, in advertising social functions, in staging and participating in the giving of plays and pageants, and in other activities too numerous to mention in this brief review. All this can be accomplished through the organization of art clubs.

AN IMPORTANT ASPECT OF THE ART EDUCATION PRO-GRAM IS THE BUILDING UP OF GROUP CONSCIOUSNESS, WITH INTEREST IN COMMON PURPOSES AND ABILITY TO WORK TOGETHER COOPERATIVELY. Puppets, Properties, and Theater Made by Members of the Marionelle Club of Junior High School 91, Baltimore, Maryland.



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 Some knowledge and appreciation of art is necessary in aearly every field of work. Art will help you to live more effectively.

- 2. The desire to express one's thoughts and feelings is fundamental. Art provides an outlet for imagination and the creative impulse.
- 3. Works of art are enduring records of high human achievement. Art will help you to endure necessary mechanical drudgery and will stimulate pride in your work.
- 4. Design is an important element in manufacturing, engineering, and in industry generally. Art will help you in the technical courses.
- 5. Art figures largely in modern advertising and in business. Art will help you in the commercial courses.
- 6. Do you know that people of all periods and countries have reflected their experiences in the things they have made? Art will help you to a clearer understanding of history and geography.
- 7. Some of the world's greatest thinkers have written extensively on architecture, sculpture, and painting. Art will help you to a fuller appreciation of literature.
- 8. Design laws are natural laws. Art will help you to a fuller conception of science.
- 9. Do you know that art is expression in appropriate form? Art will help you to acquire control over materials.
- 10. Do you know that design is prerequisite to beauty? Art will help you to improve your surroundings, to make life more satisfying.
- 11. The selection and arrangement of things are conditioned largely hy one's sensitiveness to lines, masses, and colors. Art fosters
- 12. Just as the production of art implies creation, so does an appreciation of art imply recreation. Art will help you to employ your leisure time more advantageously.
- 13. Ability to enjoy works of art is today an accepted criterion of culture. Art will increase your capacity to appreciate through

an understanding of the difficulties involved, gained by actual experience with materials.

14. There is always a need for artists and art teachers. If you have outstanding creative ability, art will help you to prepare for a distinguished professional career.

GUIDANCE IN ART

Since the adolescent period is particularly the time for vocational and educational adjustment, special attention is given at this stage to the talented pupil, who is carefully watched and encouraged to go on with his training in the senior high school and later in college or in the special art school.

The art field offers unusual inducements to the boy or girl who is gifted with an unusual artistic capacity. There is a constant need for art workers and art teachers because, as Bailey's so aptly observed, "Without architectural design our city would be reduced to log cabins. Without sculptural design we would have no monuments, no ornaments in relief, no coined money; without pictorial art, no mural decorations, no pictures, no illustrations; no illuminated advertisements, no paper money, nor postage stamps would be possible. Without decorative design we would have to dispense with rugs. carpets, wallpaper, draperies and figured dress goods of every kind. Without structural design our furniture would be rustic only; our ntensils, coarse baskets, clay bowls, flint and chop sticks; our fixtures, a camp fire for cooking and a pine knot for light; our jewelry, brightcolored seeds, shells and knuckle bones. Without costume design we would all be Adams and Eves. In short, without these arts we would be reduced to erudities of the primitive man."

¹ Bailey, Henry Turner, Director, Cleveland School of Art, 1917 to 1931,

The following information on vocational guidance is contributed by Leona C. Buchwald, Supervisor of Guidance and Placement in Baltimore, Maryland. The material was developed by Miss Buchwald in cooperation with a committee of representatives of business, industry, and the professions. A copy of these suggestions is given to each speaker who takes part at a vocational conference held for the benefit of the students in the school. They should be found equally helpful to the teacher who would offer guidance instruction in his own particular field of teaching,

An important supplement to the guidance program of giving occupational information to boys and girls now in school is the assistance received from speakers engaged in business and industry and in the practice of the professions. The purpose of an outside speaker in the guidance conference is to give the students first-hand information about a particular occupation. The speaker's aim is to present facts as fairly as possible about the working field which he represents, rather than to boost his vocation. It is not the object to nttract students to the occupation by an appeal to the romantic side of the work. The speaker should bring with him the impression of success, thereby offering inspiration as to the value of preparation for something worth while. It is well for the speaker to understand that he brings a fresh point of view that is valuable to the students, even in complasizing points already studied in the classroom.

THE GUIDANCE CONFERENCE

The following questions are presented to suggest the kind of information that needs to be given in a guidance conference:

1. How would you define your occupation?

2. What are the principal divisions into which the work in your field may be classified?

The detail with which this is handled should vary with the age and advancement of the students hearing the talk.

- 3. Describe the actual work duties of your occupation. What responsibilities are attached to workers in varying stages of development?
- 4. What kind of work does a beginner in this field undertake and how is promotion normally effected?
- 5. Is training given to the individual after he starts to work; if so, what does it entail?
- 6. Discuss the personal characteristics that are requisite for work in this field.

Ability to meet people easily, interest in detail, dependability, initiative, accurrey, courtesy, alertness, personal appearance, adaptability, etc.

7. What can the student do at the present time to develop the habits which formulate good personal characteristics?

Establish punctuality, good nttendance in school, correct English, accuracy in following assignments, cooperation, etc.

- What advantages are there in selecting this kind of work and what less desirable features of the work ought to be considered?
- 9. What education is normally expected for entrance in this field?
 - 10. Is specialized education essential for entering the field?
 - 11. What school subjects bear close relationship to your work?
- 12. What is the present general status of employment in your field?
- 13. What are the approximate ranges of income carned by those entering your occupational field?

SUGGESTIONS TO SPEAKERS

- In developing your talk, thought should he given to the grasp that the children in the audience may have. Stress should he laid on the earlier forms of work in your field, hefore the more advanced stages are discussed.
- 2. It is of advantage to ask questions of the students during the development of the talk. If they are prompted to contribute what they already know, or think ahout the occupation, you have an opportunity to correct any misconceptions which the students may have.
- Illustrative stories drawn from your own field are helpful and stimulate interest. Your own personal experience is particularly valuable when discussing the steps by which one learns to meet problems.
- Any illustrative material or forms which you may leave in the hands of the students will be helpful.
- Allow time for questions at the close of your talk. To avoid a pause, be prepared to occupy this time with further discussion.
- In considering the valuable features of your occupation, it is well to mention actual accomplishments which have been made by people already in the field.
- 7. As a result of your experience, you can leave with the students a valuable impression of the power to grow, which arises from readiness to undertake new activities.

COURSES

Art is offered as a subject of study in most junior high schools, and it should be offered in all as a constant or required major study. Since the work in art in junior high schools is general in character,

aiming as it does to represent the entire field of art, the single course offered is commonly referred to as the general art course.

PROCEDURES

The procedure in carrying on a unit of teaching in the elementary school was treated rather fully in the preceding chapter. Much of what was said there applies to conducting junior high school art units. There remains, however, one additional point which should be discussed, and that is the creativeness of junior high school boys and girls as compared with those in the elementary schools.

There is considerable empirical evidence going to show that junior high school children are less creative than elementary school children. The experience of most teachers would indicate that this is true, yet occasionally some junior high school art teacher is able to secure results that are remarkably creative—even more creative than those secured by some excellent teachers in the elementary school grades. May it not be true that the sometimes apparent lack of creativeness on the part of junior high school pupils is due, not to any innate lack of ability on their part, but rather to a lack of the proper psychological approach on the part of the junior high school art teacher?

In order to meet this need for improvement in the approach to creative problems, and to counteract the helief that children of junior high school age are hopelessly uncreative, which is certainly far from the truth, the following suggestions are offered with the hope that they may give the teacher confidence in the matter of encouraging creative expression.

Drawings or paintings which are the enlmination of the experiences of pupils should be creative; they should be the free and individual expressions of the children who produce them, neither subject matter nor art form nor technique having been imposed by the teacher. This should not mean, however, that the foundation for such expressions should not be carefully laid by the teacher in advance of the process of creation. It does mean that pictures should not be copied from books or from other sources.

In the quotation that follows, Pittman¹ calls attention to an emphasis in art education which is indeed worthy of stressing throughout the curriculum. "Ducan Phillips, one of America's most discriminating and knowing art patrons, is the author of the book, The Artist Sees Differently. This excellent title is an adequate definition for any field of the fine arts. Unless the artist sees differently, his aims, no matter what bis knowledge or standards may be, are absolutely futile. But this 'seeing differently' is difficult for many to interpret. It does not mean that the artist must rearrange or distort nature completely in order to make his performance. He bas the right to abstract his shapes and forms so that his pattern functions properly in contributing to the whole. While a goodly number of artists completely build their organizations on the complex, abstract idea of picture building, there are others who stay closer to the true elements of realism and maintain the penetrating essence of their objective."

¹ Pittman, Hoboon, "The Quaker Murals at Friends' Central," Circular of Friends' Central School, Overtrook, Pa., 1937.

THE ART PERIOD SHOULD BE ONE OF CONTINUOUS SELF-EXPRESSION AND OF CONSISTENT SELF-REALIZATION, OF ASPIRATION AND OF DREAMS. Children of Eighth Grade at Work in Art Class on a School Mural, Hamilton Junior High School, Baltimore, Maryland.



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Pupil experience will, if properly stimulated and guided, result in some desirable form of art expression. While a unit of work is in progress, the teacher should make clear to the class the various visual aspects of the unit which are essential to an understanding of it and which will, therefore, have a bearing on the creative expression growing out of it.

Such a background of experience can readily be provided through the preliminary showing of illustrative material, such as objects and prints, and the use of dramatization and of class discussion. Class visits to institutions and localities where significant objects are to be seen and experience acquired are also desirable. Pupils might, under certain conditions, be taken on an excursion to a neighboring store, factory, or public building; to the art, science, or history museum; or to the public library. Sometimes, too, children should be encouraged to make such visits individually rather than in a group. Such vital pupil experience should, under effective teaching, grow into appropriate concrete expression.

As pointed out by Boas, "People differ enormously in imaginative power, some living in a world of rich fantasy, others in a world of literal facts, and between the two extreme groups are many of varying degrees of fact and fancy. As teachers we can only strive to

IDEAS MUST BE EXPERIENCED, MUST BECOME MEANING-FUL BEFORE THEY CAN BE TRANSMUTED INTO ANY KIND OF ORDER. THE CLEARER THE CONCEPT, THE EASIER WILL BE THE EXPRESSION OF IT. Primitive Man. Chalk Drawing, by a Screenly-grade Child, Horace Mann School for Girls, New York City.

¹ Boas, Belle, "Grade Levels in Art Education," paper presented before The Maryland State Teachers Association, 1933.

bring forth what is there, farther we cannot go. But we can provide stimulating situations which stir up the imaginative powers even if in varying degrees, which then are released in doing of some kind, doing which is the very breath of living to children. But we must as teachers realize that one does not create in a vacuum. Ideas must be experienced, must become meaningful before they can be transmuted into any kind of order. The clearer the concept, the easier the expression of it."

In order to facilitate the process of generating creative expression, the teacher may help the pupils to recall and talk about their experiences, and sometimes to describe minutely the objects and episodes that interest them most. As the themes are presented, the teacher may well make on the blackboard a list of the various topics suggested. Each theme may then be discussed according to its inspirational possibilities.

Before beginning work on his drawing or painting, each pupil should decide on a theme. The list of themes compiled by the class should be found helpful to the pupil in deciding on a title for his picture. The final choice of theme should, however, be left entirely to the individual child, even if it should not relate to the information experience of the unit in progress at the time.

The actual carrying out of an illustration should be left to the individual child, unless he should ask for help. The discussion of art principles such as those relating to composition, color, and representation should generally be left until the evaluation or appreciation period, which is generally held at the close of the lesson.

These suggestions apply to all the creative activity experiences, not only to paintings and drawings but to modeled and carved forms, and to any constructed work that the child may undertake.

THE SELECTION OF UNITS OF TEACHING

The teacher of art in the junior high school should recognize the special aims of the junior high school and should take cognizance of these purposes in selecting topics for units of teaching. The selection should be made quite largely on the basis of the criteria enumerated for the elementary school (see pages 99 and 100). Because of the differentiated program of studies in the junior high school the topics selected should however relate more directly to art interests. Here, certainly, art in the school should assume a place commensurate with that which it occupies in life outside, where the nrt activities of man are manifest in works of architecture, sculpture, and painting, and even in industrial art and in advertising.

It is well for the teacher to make a rather careful survey of the art field and to hegin to formulate a list of subjects suitable for inclusion in the course of study. This list should be made with the general objectives of the junior high school and of the pupils' interests and capacities in mind. He should have clearly in mind, too, the relationships that exist between art and the other subject-matter nreas included in the junior high school organization, such as technical, commercial, home economics, industrial, scientific, historical, and classical studies. He should also keep constantly in mind the occupational or professional phases of instruction. It is just as important to guide certain individual pupils away from art vocations as it is to guide others into them.

"In the junior high school," writes Boas, social cooperation becomes a powerful force which, combined with an intense curiosity and netivity, tends to foster art interest, provided there is group

Masks Stagecraft Marionettes Local Architecture

Stained Glass Mossies

8. Relagious Approach Religion and Art.

9. INDUSTRIAL APPROACH Art in the Factory Printing and Publishing Art in Trades

ILLUSTRATIVE MATERIAL

The teacher should have readily available for use at all times suitable books and prints which will be helpful to pupils in connection with their art studies. Some of this material may be put on reference in the school library, but much of it should be kept in the classroom.

As the work develops, the teacher, with the cooperation of the pupils, should keep a file of pictures in monotone and color prints as they appear in the newspapers, magazines, and advertising circulars. These should be carefully mounted and placed in folders alphabetically arranged. (For suggestions on mounting see pages 256 to 258.) Each folder should be given a carefully lettered title and the folders should be properly filed in alphabetical order. The folders should be of standard sizes, the number of sizes being determined by

The print collection should also include as many photographs and fine prints as possible, according to the means of the school to provide them. The art standard of the entire collection should be as high as it is possible to attain, and the mounting and labeling should be artistically carried out, insolar as possible by the children themselves. As pointed out by Ireland, for purposes of comparison examples of poor design should be included, but they should always be so labeled.

I Ireland, N. O., The Forters File, The F. W. Faxon Company, Boston, 1935.

Still pictures in the form of lantern slides, and motion pictures, insofar as they may be procurable, should also play an important role, and objects themselves should be used wherever possible. Objects of art and of nature may be seen wherever museum collections are accessible, and some of these objects may be borrowed periodically by the school. Prints and lantern slides may be borrowed from the public libraries, as well as from the art museums. The department stores present another source of visual art material of all kinds.

REPRODUCTIONS OF PAINTINGS

The accompanying list of artists and their works includes a selection of authentic color reproductions that are available for the use of teachers of art and of other school subjects. All the titles included are procurable in the miniature size, approximately 3 by 4 inches, and in the standard size, approximately 8 by 10 inches. A few of the subjects are available also in large size, approximately 16 by 20 inches. The approximate cost of the prints is 2 cents each for the miniatures, 50 cents each for the standard size, and \$3 each for the largest size. It will be noted that the artists have been grouped according to nationality or the schools of painting to which they belong. The subjects marked with nn asterisk are procurable in the large size.

ITALIAN

Artist	Title	Artist	Tille
Cimabue	Madonna Enthroned	Lippi	Madonna Adoring the
Giotto Angelico Angelico	S1. Francis and the Birds Annunciation Madonna and Angels Madonna	Lippi Bellini, G. Bellini, G.	Child Madonna and Child Madonna and Saints Resurrection of Christ

¹The list is reproduced through the courtest of Francis II. Robertson, President of Artest Prints, Inc., of Westport, Connecticut, See also hits appearing on pages 106 to 109.

activity. Interest here widens from the school to the club, the church, the community. There is at this time a desire to make things look right by poetic images, by heroic figures, by literary idols. To many school activities, art lends its vivifying influence.

"Pupils must learn to appreciate art not merely as a manifestation of past history such as a series of Egyptian and Greek friezes, or Medieval pageants, hut as an evidence of the present-day social order. The lessons in appreciation will be a part of the creative work, both being indissolubly interrelated and interdependent. They should realize that no fine work can be obtained without study and practice. But individualism shows strongly at this time because of the varied and intense enthusiasms, and because of this, the teacher will find that freedom in subject matter will produce greater growth."

A list of subjects suitable for junior high school art units might, under various curriculum requirements, include such topics as the following, the grade level placement heing determined by the local school syllabus.

TOPICS SUGGESTED FOR JUNIOR HIGH SCHOOL UNITS OF TEACHING

Although there is doubtless some overlapping, the grouping of topics for units under a few general headings should help the teacher to keep in mind the purposes of the junior high school that distinguish it from those of the senior high school. The list is not intended to be exhaustive or complete, but merely to exemplify the possibilities afforded.

1. Aesthetic Approach Explorations in Color Natural History in Art

The Human Figure in Art Handieraft versus the Machine

Art as a Language Animals in Art Writing as Art, Including Manuscript Writing Surrealism

2. CIVIC APPROACH

Art in a Democracy
Community Planning and
Maintenance
Coins and Medallions
Postage and Revenue

Stamps
Taking Care of the School and School Property
The School Museum
A School Mural
School Publications

8. DOMESTIC APPROACH
Art in Care of the Home
Design and Fashion in Clothing
Everyday Art Problems
Furniture throughout the
Ares

4. Occupational Approach
Cartooning
Art and Merchandising

Cinema Art Directing
The Profession of Painting
Marine Architecture
Sculpture
The Handerafts
Art Education Occupations
Landscape Design
Sign Painting

5. Period Approach
Contemporary Art
Greece's Contribution to Art
Our Indebtedness to the
Roman Builders
Chivalry and Art
Buried History (Archaeology)
The Growth of Art in

6. TECHNIQUE APPROACH
The Development of a
Painting
Sculpture Methods
How Prints are Made
Design as Space Art

America

7. RECHEATIONAL APPROACH
Art in Motion Pictures

Batik

Masks Stagecraft Marionettes

Local Architecture

8. Religious Approach Religion and Art

Stained Glass Mosaics

9. Industrial Approach Art in the Factory Printing and Publishing Art in Trades

ILLUSTRATIVE MATERIAL

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TALIAN.

Artist	Title	Artist	Title
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Giollo Angelico Angelico	Annunciation Madonna and Augels Madonna	Lippi Bellini, G. Bellini, G.	Madonna and Child Madonna and Saints Resurrection of Christ

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TTALIAN

	LIMA	GEALLA.	
Artist Botticelli Botticelli Botticelli Perugino Ghirlandaio Francia da Vinci da Vinci da Vinci da Vinci di Credi Carpaccio Bartolommeo Luini Albertinelli Michelangelo Michelangelo Michelangelo Titian Titian	Title The Magnificat "Spring Virgin and Child Frankfort Madonna Visitation Madonna of the Rose Garden The Last Supper Madonna of the Rocks "Mona Lisa Annunciation Angel with Lute (detail) Holy Family Head of the Virgin Marriage of St. Catherine The Visitation Creation of Adam Delphic Shyl The Fall of Man The Concert The Tribute Money	Artial Tritian Tritian Tritian Tritian Raphael Raphael Raphael Raphael Raphael Raphael Raphael Raphael Correggio Correggio Correggio Correggio Tintoretto Veronese Veronese Veronese Reni	Title Danae *Lavinia Virgin on Steps (detail) *Madonna del Granduca Madonna della Tenda *Madonna della Tenda *Madonna della Tenda *Madonna della Tenda *Madonna Getail) Sistine Madonna (detail) Sistine Madonna (entire) Madonna Tempi The Transfiguration Holy Family Madonna of the Harpies St. John the Baptist Castello Madonna *The Holy Night Madonna Adoring the Child Music (Nude Figures) Captain of Capernaum Feast of Levi
Giorgione	The Concert	Veronese Veronese Reni	Captain of Capernaum
Memling	(detail)	Carlo Dolci Tito RMAN	*Madonna of the Veil Venetian Waters

Durer Cranach Holbein Holbein Thoma	Martin van Nieuwen- hoven Hans Imhoff Madonna and Child Erasmus The Merchant Gisze Dancing in a Ring	Leihl Kampf Uprka Oppler Hofer

*Women in Church Belgian Farm Going to Church, Moravia

Interior
*Landscape at Muzzano

FLEMISH

David, G. Rubens Rubens Rubens Rubens Rubens Van Dyck

Adoration of the Kings Van Dyck
The Crucifision Yan Dyck
Flight into Egypt Van Dyck
Fruit Garland—Cherubs
Fortrait of the Artist
Resurrection of Lazarus
Baby Stuart
Baby Stuart

Children of Charles I Lamentation Portrait of Charles I William II and Mary Stuart

Winter

DUTCH

Artist	Title	Artist	Title
Hals	The Jester	Vermeer	Lady with Lute
Hals	The Laughing Cavalier	Vermeer	*View of Delft
Hals	Nurse and Child	Van de Velde	The Cannon Shot
Hals	The Singing Boys	Hohbema	*Avenue of Trees
Rembrandt	A Polish Nohleman	Mauve	Return to the Fold
Rembrandt	*Saskia	Van Gogh	*Bridge at Arles
Rembrandt	*The Night Watch	Van Gogh	 Cornfield in Provence
Rembrandt	*The Syndies	Van Gogh	*Cypress Landscape
Terhorch	*The Concert	Van Gogh	*Fishing Boats at Arles
Ruisdael	*The Mill at Wyk	Van Gogh	Going to Work
de Hooch	The Apple Pecler	Van Gogh	Harvester, The
de Hooch	Dutch Courtyard	Van Gogh	House at Asnieres
de Hooch	*Dutch Interior	Van Gogh	Peasant, The
de Hooch	*The Storage Room	Van Gogh	Self Portrait
Vermeer	*Girl with Turban	Van Gogh	*Sunflowers
vermeer			
	SPA	NISII	
El Greco	Cardinal Inquisitor	Murillo	*St. Anthony
El Greco	Holy Family	Murillo	*Immaculate Conception
Velasquez	Don Carlos on Horseback	Murillo	The Pastry Enters
Velasquez	Infanta Maria	Goya	Family of Charles IV
v crasquez	Marguerita	Goya	The Water Carrier Return of the Fishermen
Velasquez	Las Meninas	Sorolla	
Velasquez	Surrender of Breda	Sorolla	The Two Sisters
Murillo	*Children of the Shell	Zulonga	Consuelo
Murillo	Repose During the Flight	Zubiaurre	Spanish Beggars
11111110		NAVIAN	
		Liliefors	Northern Sunrise
Ring	Blue Flowers	Figestad	Hoar Frost
Zorn	On the Stairs	I jac neu	
	Rt'S	SIAN	
	Jairus' Daughter	Grabar	Russian Winter
Repin	Early Snow		
Fokin			
	FRE		The Kitchen Maid
Clouet	Francis I	Chardin	Saying Grace
Claude Lorrain	·llest on the Flight	Chardin	Madame Recamier
Watteau	The Fete	David, J. L. Vigée-Lebrun	Artist and Daughter
Lancret	The Dance Camarge	Figer-12-neun	••••

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FRENCH

	r A.	CNUM	
Artist	Title	Artist	Tille
Corot	Dance of the Nymphs	Manet	The Fifer
Corot	Spring	Degas	La Danseuse
Treyon	Going to Market	Cezanne	*Park Landscape
Troyon	Pasturage	Cézanne	Self Portrait
Millet	*The Angelus	Cézanne	*The Blue Vase
Millet	*The Gleaners	Cézanne	The Smoker
Millet	*Feeding Her Birds	Cézanne	*The Stockade .
Millet	Going to Work	Cézanne	*The Village Road
Daubigny	The Pool	Monet	Church at Vernon
Courbet	The Stonehreakers	Renoir	Paris Boulevards
Bonheur	Oxen Plowing	Rousseau	On the River
Bonheur	The Horse Fair	Gauguin	Farmyard Scene
Chavanne	St. Genevieve	Gauguin	Tahiti
Breton	*Song of the Lark	Scurat	Near the River Scine
Cazin	Hagar and Ishmael	Seurat	The Bathers
L'Hermitte	The Wheelwright	Matisse	Blue Window
Bastien-Lepag	e Joan of Arc	Matisse	Bouquet
Carrière	Home Work	Derain	*Castle Gandolfo
Daumier	The Washerwoman	Picasso	View from the Studio
Manet	The Breaklast	Utrillo	*Church at Villetareuse
		ENGLISH	

	231101	1011	
Reynolds Reynolds Gainsborough Romney Rachurn Lawrence Lawrence Turner Turner Constable Constable	Age of Innocence Angels' Heads Miss Bowles The Blue Boy Mrs. Robinson Boy with Rabbit Mrs. Siddons The Calmady Children The Fighting Temeraice View of Venice The Comfield The Valley Farm	Landseer Watts Watts Brown, F. M. Hunt Rossetti Milhais Burne-Jones East Lavery	Shoeing the Mare Love and Life Sir Galshad Washing Feet of Dis- ciples *Light of the World Annunciation Boyhood of Raleigh King Cophetun and Beg- gar Maid Evening in Algeciras On the Cliffs

Stuart Trumbull Sully	George Washington Signing the Declaration The Torn Hat	Inness Inness Church	

After a Summer Shower The Mill Pond Cotopaxi, Ecuador

AMERICAN

Artist Whistler Whistler Martin Homer Homer Homer Chase Duveneck Thayer Thayer Hitchcock Abbey Sargent	Title Battersea Bridge *The Artist's Mother Harp of the Winds A Northeaster Moonlight, Wood's Island *The Fog Warning Self Portrait Whistling Boy Boy and Angel The Virgin Young Woman Holland Morning King Lear Carmeneita	Artist Sargent Sargent Sargent Volk Metcalf Hassam Melchers Ufer Rellows Wood Curry	Title Carnation, Lily, Lily, Rose Discouraged Prophets James Whiteomb Riley Hopeful Prophets Portrait of Lincoln Icebound Church at Old Lyme Christ at Emmaus The Solemn Pledge Man on the Dock American Gothic Elephants at the Circus

MEXICAN

Mexican Child Rivers

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THE PREPARATION OF ORGANIZATION OUTLINES

A balanced organization plan for a junior high school unit of teaching should include both information experience and activity experience, and a balance should be achieved between the general and technical aspects of information experience on the one hand and between the directed and creative aspects of activity experience on the other. The general-information experience to be provided in the teaching unit should be related as closely as possible to the art interests around which the unit is organized. The technical information should have to do with technique and with ae-thetic considerations.

FRENCH

Artist Trile Artist Title Corot Dance of the Nymphs Manet The Fifer Corot Spring Degas La Danseuse Troyon Going to Market Cézanne *Park Landscape Trovon Pastura ge Cézanne Self Portrait Millet *The Angelus Cézanne *The Blue Vase Millet *The Gleaners Cézanne The Smoker Millet *Feeding Her Birds Cézanne *The Stockade . Millet Going to Work Cézanne *The Village Road Dauhigny The Pool Monet Church at Vernon Courbet The Stonebreakers Repoir Bonheur Paris Boulevards Oxen Plowing Rousseau Bonheur On the River The Horse Fair Gauguin Chavanne Farmyard Scene St. Genevieve Breton Gauguin Tahiti *Song of the Lark Seurat Cazin Hagar and Ishmael Near the River Seine Seurat L'Hermitte The Bathers The Wheelwright Matisse Bastien Lepage Blue Window Joan of Arc Matisse Carrière Home Work Bouquet Daumier Derain The Washerwoman *Castle Gandolfo Manet Picasso The Breakfast View from the Studio Utrillo *Church at Villetareuse ENGLISH Reynolds Age of Innocence Landseer Reynolds Shoeing the Mare

Angels' Heads Reynolds Watts Miss Bowles Gainshorough Watts *The Blue Boy Romney Brown, F. M. Mrs. Robinson Rachurn Boy with Rabbit Lawrence Hunt Mrs. Siddons Lawrence Rossetti The Calmady Children Turner Millais The Fighting Temeraire Turner Burne-Jones View of Venice Constable The Cornfield Constable East The Valley Farm Lavery

AMERICAN

Stuart Trumhull Sully

George Washington Signing the Declaration The Torn Hat

Inness Inness Church Love and Life
Sir Galahad
Washing Feet of Disciples
*Light of the World
Annunciation
Boyhood of Raleigh
King Cophetua and Beg-

Evening in Algeciras On the Cliffs

gar Maid

After a Summer Shower The Mill Pond Cotopaxi, Ecuador

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AMERICAN

Moonight, Wood's Island Homer		21341	MILENTIN	
Thayer The Virgin Uler The Solemn Pledge Thayer Young Woman Bellows Man on the Dock Hitchcock Holland Morning Wood American Gothic Abbey King Lear Curry Elephants at the Circu	Whistler Whistler Martin Homer Homer Chase Duveneck	Title Battersea Bridge *The Artist's Mother Harp of the Winds A Northeaster Moonlight, Wood's Island *The Fog Warning Self Portrait Whistling Boy	Sargent Sargent Sargent Sargent Volk Metcalf Hassam	Carnation, Lily, Lily, Rose Discouraged Prophets James Whitcomb Riley Hopeful Prophets Partrait of Lincoln Icebound Church at Old Lyme
	Thayer Thayer Hitchcock Abbey	Boy and Angel The Virgin Young Woman Holland Morning King Lear	Melchers Ufer Bellows Wood	Christ at Emmaus The Solemn Pledge Man on the Dock

MEXICAN

Rivera

Mexican Child

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FRENCH

	F	RENCH	
Artist	Title	Artist	Title
Corot	Dance of the Nymphs	Manet	The Fifer
Corot	Spring	Degas	La Danseuse
Troyon	Going to Market	Cézanne	*Park Landscape
Troyon	Pasturage	Cézanne	Self Portrait
Millet	*The Angelus	Cèzanne	*The Blue Vase
Millet	*The Gleaners	Cézanne	The Smoker
Millet	*Feeding Her Birds	Cézanne	*The Stockade .
Millet	Going to Work	Cézanne	*The Village Road
Daubigny	The Pool	Monet	Church at Vernon
Courbet	The Stonebreakers	Renoir	Paris Boulevards
Bonheur	Oren Plowing	Rousseau	On the River
Bonheur	The Horse Fair	Gauguin	
Chavanne	St. Genevieve	Gauguin	Farmyard Scene
Breton	*Song of the Lark	Seurat	Tahiti
Cazin	Hagar and Ishmael	Seurat	Near the River Seine
L'Hermitte	The Wheel wright	Matisse	The Bathers
Bastien-Lepage	Joan of Arc	Matisse	Blue Window
Carrière	Home Work	Derain	Bouquet
Daumier	The Washerwoman	Picasso	*Castle Gandolfo
Manet	The Breakfast	Utrillo	View from the Studio
		**	*Church at Villetareuse
Reynolds	Age of To	ENGLISH	
Reynolds	Age of Innocence	Landseer	Shooing the Man

Reynolds Gainsborough Romney Raeburn Lawrence Lawrence Turner Turner Constable Constable	Angely Heads Miss Bowles Miss Bowles The Blue Boy Mrs. Robinson Boy with Rabhit Mrs. Siddons The Calmady Children The Fighting Temeraire View of Venice The Cornfield The Valley Farm	Landseer Watts Watts Brown, F. M. Hunt Rossetti Millais Burae-Jones East Lavery	Shoeing the Mare Love and Life Sir Galahad Washing Feet of Dis ciples "Light of the World Annunciation Boyhood of Raleigh King Cophetua and Beg gar Maid Evening in Algeciras On the Cliffs
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AMERICAN

SII.	George Washington Signing the Declaration The Torn Rat	Inness	After a Summer Showe The Mill Pond
		Church	Cotopaxi, Feuador

AMERICAN

	AMI	MICAN	
Artist Whistler Whistler Martin Homer Homer Homer Chase Duveneck Thayer Thayer Theyer Hitchcock Abbey Sargent	Battersea Bridge *The Artist's Mother Harp of the Winds A Northeaster Moonlight, Wood's Island *The Fog Warning Self Portrait Whistling Boy Boy and Angel The Virgin Young Woman Holland Morning King Lear Carmencita	Artisi Sargent Sargent Sargent Sargent Volk Metcalf Hassam Melchers Ufer Bellows Wood Curry	Title Carnation, Lily, Lily, Rose Discouraged Prophets James Whitcomb Riley Hopeful Prophets Portrait of Lincoln Icebound Church at Old Lyme Christ at Emmaus The Solemn Pledge Man on the Dock American Gothic Elephants at the Circus
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MEXICAN

Rivera Mexican Child

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Directed activity implies activity which is not creative, its purpose being, nevertheless, to develop skills which will find fulfillment in creative expression. Creative activity is not directed; it is the creative expression.

According to Roy,¹ "Those preparing to become art teachers at the high school level should at the outset of their training gain an understanding of the meaning of a unit of teaching, and they should also understand the make-up of the unit, its form and content. The knowledge of procedures involved would come after a fundamental understanding of the organization of the unit has been acquired by the student. The planaing of units, step by step, including the making of lesson plans illustrated with personal drawings and clipped material, would then be a final objective of the teacher-training curriculum."

An organization outline for a unit of teaching appropriate for a junior high school grade is presented on page 172. The diagram is accompanied by a description of the unit arranged in sequential order, such as might be used in the mimeographed or printed course of study.

CARRYING ON A UNIT OF TEACHING

The classroom and the class itself are put in readiness for the work at hand. This includes the adjustment of the necessary equip-

¹ Roy, Vincent A., unpublished Teacher Training Course of Study, Pratt Institute, Brooklyn. New York, 1938.

THE TEACHER'S AIM SHOULD BE TO HOLD EACH CHILD TO THE HIGHEST ACCOMPLISHMENT THAT HE IS CAPABLE OF, AS JUDGED BY THE PUTL'S OWN STANDARDS. Portrait in Transparent Water Color, by Marian Meiser, Age Fifteen, Tenth Grade, Forest Park Senior High School, Ballimore. Maryland.

ment and apparatus, as well as of the mental and spiritual environments. Previous experience gained from reading, from excursions, motion pictures, lantern slides, and prints may be referred to. Thus each lesson undertaken should have its brief orientation period to help the class to adjust itself to the new situation at hand.

The orientation period is followed directly by pupil planning which may logically be considered as design. This will include purposeful class discussion; the consideration of mediums and processes necessary to carry out the project; the consideration of such matters as size, shape, and finish; a consideration of themes, if themes are to be involved. All such discussion, as well as the making of plans in the form of drawings or designs, including decoration, come within the range of the design stage. To design is to plan the work involved in the entire unit. Design, therefore, is to be conceived of as an intellectual and spiritual as well as a manipulative enterprise.

While the activities of the unit are in progress, the teacher should be in continual readiness to offer comments of encouragement as the occasion may require. His aim should be to hold each child to the highest accomplishment that he is capable of, as judged by the pupil's own standards. It goes without saying that the class should acquire from the activities considerable information experience during this stage of the unit's development.

The entire group should be called together occasionally to report on problems, discoveries, and progress, and to evaluate their efforts and products which may still be in an unfinished condition. The best time for such a discussion is usually at the end of the class period. Provision should also be made for the general appreciation period on the completion of the entire unit.

DESCRIPTION OF A JUNIOR HIGH SCHOOL UNIT ON ARCHITECTURE

Show slides to stimulate discussion of influences of climate, materials, and historic styles on buildings of the present day. Call attention to the six types of architecture: domestic (homes), educational (schools), religious (churches), governmental (city and stnte buildings), industrial (factories), and commercial (stores). Point out that the buildings of various peoples differed according to climate—cold, temperate, hot. Consider the materials used, such as stone, artificial stone, brick and tile, wood, and metal. Read nbout the beginnings and development of architecture. Become acquainted with the names of a few outstanding architects of the present and the past—Frank Lloyd Wright, H. H. Richardson, Thomas Jefferson, Christopher Wren, and Michelnngelo Buonarotti. Mnke inquiry regarding architecture as a profession.

Have the members of the class make tracings of simple illustrations showing beauty of line in any type of architecture that interests them most, considering how force or character have been expressed by vertical, horizontal, and dingonal straight lines, and by curved lines. Indicate that the architect's problem is to mrange the plan of structure in such a way as to impart beauty without sacrificing convenience. Discuss the influence of one type of mehitecture on another: Egyptinn, Greek, Roman, Romanesque, Byzantine, Gothic, Renaissance, Modern. Discuss the meaning of the term "functional architecture."

Explain the action of plaster of Paris, used in casting. Demonstrate how paper may be used to make folders to hold drawings and

JUNIOR HIGH SCHOOL ART UNIT

Information		Activity	
General	Technical	Directed	Creative
The names of a few outstanding archi- tects of the present	The buildings of various peoples differed according to climate—cold.	Tour of city	A chart to show the six types of architecture
and the past Quotations from liter- ature that relate to architecture The beginnings and development of ar-		The different architec- tural influences present in familiar buildings Tracing of simple illus-	Sketching of interesting buildings of various types in the commun- ity
ehitecture Architecture is the art which seeks to har- monize in building the requirements of beauty and utility The six types of archi- tecture: domesti (houses), educa.	as atone, artificial atone, brick and tile, wood and metal Meaning of the term "functional architec- ture" Meaning of plan and ele-	trations showing beauty of line in any architec- ture, considering how force and character have been expressed by vertical, horizontal, and diagonal straight lines,	Simple folders with title and name, to hold
tional (schools), re ligious (churches) governmental (courthouses), in dustrial (factories) and commercia	The influence of one type of architecture on another—Egyptian, Greek, Roman, Roman esque, Byzantine,	and illustrative ma- terial relating to the architectural field	gested topics: Mode
(offices and stores The architect's prol- lem is to arrange if plan of a structu- in such a way as impart beauty with out sacrificing co	Modern The use and care of materials, such as pape and ink, clay and plasticene, and plaster of	the Art Museum Labels for the exhibit	School museum exhibits of work done in connection with the unit
venience Architecture as a pr fession	Paris The action of plaster of Paris, used in easting		

DIAGRAM TO SHOW HOW CONTENT ITEMS MAY BE ORGANIZED FOR A JUNIOR HIG SCHOOL UNIT

THE JUNIOR HIGH SCHOOL PROGRAM

illustrative material relating to the architectural field. Design a cover decoration for folders, including a carefully lettered title and the name of the pupil. Plan for the construction of a number of groups of buildings, each made up of several simple structures to be worked out by individual pupils. Include landscaping in the plans. Suggested topics: Model Town: Group of School Buildings; Homes of Tomorrow.

Make arrangements for the sketching of interesting buildings of various types in the community. Encourage pupils to make folders to hold original drawings and illustrative material. Allow pupils to carry out their designs for models of buildings and to arrange them according to their own original plan. Divide the class into groups according to interests: (1) draftsmen, (2) landscape architects, (3) modelers, (4) easters, (5) finishers. Instruct the class in the use and care of materials, such as paper and ink, clay and plasticene, and plaster of Paris. Apply the cover decoration to folders. Finish models of buildings.

Observe how architecture is the art which seeks to harmonize in building the requirements of use and beauty. Find quotations from literature that relate to architecture, such as the following, from Ralph Waldo Emerson:

The hand that rounded Peter's dome,
And groined the nisles of Christian Rome
Wrought in a sad sincerity;
Himself from God he could not free;
He builded better than he knew;—
The conscious stone to beauty grew.

Take the class an a taur of the community, having boys and girls point out, on the buildings seen, evidences of the different archi-

tectural influences present. Go with the class to see architectural exhibits at the art museum.

Although the preceding description was planned for a unit of teaching in art, its scope, as can be seen, may well extend beyond the confines of art as a school subject. As was pointed out in the preceding chapter, an effective education unit must often be broader than a single school subject, while integration will call for an enriched curriculum made up of courses of study that bave taken into account the vital experiences of boys and girls.

PLANNING THE LESSONS

The junior high school art teacher who has systematically worked out an organization diagram for a particular unit of teaching should find the preparation of plans for the unit a comparatively simple undertaking, as the organization outline will contain precisely the instructional material required for developing the individual lesson plans.

A series of lesson plans is included at this point, to show what a satisfactory sequence should be like. Plans similar to these in form, but adapted in subject matter and method to the ability of pupils, may be developed in a similar manner, to meet the needs of art classes at any junior high school level.

ARCHITECTURE

A UNIT OF TEACHING IN ART FOR A JUNIOR HIGH SCHOOL GRADE

(For the organization diagram of this unit see page 172)

STAGES OF DEVELOPMENT

1. ORIENTATION STAGE

Lesson I. What we know about architecture around us Lesson II. What we know of the history and development of architecture

THE JUNIOR HIGH SCHOOL PROGRAM

2 Design Stage

Lesson III. The styles of architecture and materials used in architecture Lesson IV. Making our sketches and plans for model buildings

3. FORMING PRODUCTS STAGE

Lesson V. Making our model buildings
Lesson VI. Continuing the work on model buildings
Lesson VII. Completing the model buildings

4. APPRECIATION STAGE

Lesson VIII. Evaluating and discussing the finished products

1. ORIENTATION STAGE

LESSON I. WHAT WE KNOW ABOUT THE ARCHITECTURE AROUND US

Aims. To appreciate architecture, ancient and modern; to discuss architecture in the buildings around us.

Materials. Illustrations and lantern slides of different types of architecture as represented in modern buildings.

What do we know about the buildings around us, in our city and vicinity? (Show slides and illustrations of various types of buildings. Some are made of different kinds of materials than others.) Have you ever taken particular notice of these materials? Name some of them, John. (There are such materials as wood, stone, brick, tile, metals.) What differences do you notice in the style or type of buildings that you have seen, Bill? (Some of them are tall, some are short; some are richly decorated, some are simple in design.)

What are the various uses of buildings? (Some are built for homes; some for governmental purposes.) What are some examples of buildings in Baltimore which illustrate purposes to be served? Domestie, James? (Our homes would be classed as domestic.) Educational? (There are many good examples of this type, as City College, the new Eastern High School, the Central Library.) Religious?

as the Byzantine style. The church of Santa Sophia, built by Justinian in the sixth century, is the most typical specimen of this style. (Show slide or illustration of this church.) What is the dominating feature presented in this illustration? James? (The roof of the building is dome-shaped.) Yes, the dome-shaped roof is the leading feature of the Byzantine style. Other characteristics of the Byzantine style are the mosaic, gilding, colored glass, geometrical and conventional decoration, and the absence of the human figure in sculptures.

The conversion of the three-aisled Roman hasilica into a vaulted structure was developed during the Romanesque period. (Show slides of the Roman hasilica and the later Romanesque vaulted structure; compare.) From these illustrations, what can you say are the outstanding characteristics of Romanesque architecture, George? (There are round arches, towers, thick solid walls, few windows, vaulted roof.)

The conquest of the Moors introduced a new style of architecture into Europe after the eighth century—the Moorish or Saracenic. The edifices erected by the Moors and Saracens in Spain, Egypt, and Turkey are distinguished by a peculiar kind of the arch which forms a curve constituting more than half of a circle or ellipse. A peculiar interlacing decoration, called arabesque, is a common ornament of this style. (Show slides of the Alhambra and the Giralda Cathedral at Seville as examples.) Can anyooe give the name of a memorial in

[&]quot;WITHOUT SOME FORM OF SKILLFUL ACTIVITY ON LINES THAT ARE SOCIALLY VALUABLE, SELF-EXPRESSION IS IMPOSSIBLE. EDUCATION IS THE DISCIPLINE OF SELF WHIGH LEADS TO THAT RESULT." Building a Cathedral. Boys of Tenth Grade at Work on Original Architectural Model, Baltimore City College (High School for Boys), Baltimore, Maryland.



India of this style? It is sometimes considered the most beautiful building in the world. Edward? (The Taj Mahal is famous for its beauty and Moorish style of architecture.) (Show slide or illustration of the Taj Mahal.)

The Gothic style of architecture began in France in the twelfth century. (Show slides and illustrations of such examples as the cathedrals at Strasbourg and Cologne in Germany; of Milan and Florence, Italy; of Notre Dame and Chartres, France; and Westininster Ahbey, England.) List the striking characteristics noticeable in these illustrations. (There are pointed arches, pinnacles and spires, flying buttresses, clustered pillars, and vaulted roofs.) The most distinctive feature of this style is the predominance in it of perpendicular or rising lines, which symbolize the aspirations, adventure, and dauntless energy of the Northern and Western peoples.

At Florence in Italy ahout the beginning of the fifteenth century, the Renaissance style, a revival of the classic style based on the study of ancient models, began. For the first time since the fall of the Roman Empire civil architecture became more important than religious. Some characteristics of this style are more solid surfaces, fewer openings than Gothie, and the double colonnade. (Show slides and illustrations of the Pitti Palace; St. Peter's at Rome; the Castle of Heidelberg, Germany; the Palace of Versailles, France.)

Since the Renaissance, architecture has heen marked by two influences, the Classie Revival and the Gothie Revival. The former took place in France and the latter in England. From the time of the Renaissance to the French Revolution various styles, receiving slight modifications, prevailed throughout Europe. Since that time, greater attention has been given to the utility of public buildings and to domestic architecture.

Architecture in the United States has received its strongest influences from the classic revivals of Europe. What are some examples of architecture in the United States thus influenced, Edward? (Some examples would be the Capitol at Washington, the White House, various churches, and college buildings.) (Show slides and illustrations.) During our last lesson we named some modern buildings in Baltimore. Can you name some famous modern buildings elsewhere in the United States, Charles? (The Empire State Building would be one; also, the Woolworth Building, and Radio City, in New York.) (Show slides and illustrations.) Our domestic architecture is original and characteristic, ranging from the log cabin and the carly colonial house through many different styles to the modern apartment house. (Show slides and illustrations.)

Now that we have a background of the history and development of architecture, we shall discuss further at our next lesson the various styles of architecture and the materials used. Read about these topics in the library and get as much information as you can.

2. DESIGN STAGE

LESSON III, THE STYLES OF ARCINTECTURE AND THE MATERIALS
USED IN ADCRITECTURE

Aims. To appreciate architecture, nacient and modern; to become acquainted with the construction of buildings; to acquire knowledge of the materials used in various buildings.

Mnterials. Slides and illustrations.

During the last lesson, we discussed the history and development of architecture. Many different styles were brought out in the slides and illustrations shown. However, there was little emphasis on the materials and methods of construction used. Today we shall discuss the materials and methods of construction, chiefly in modern architecture.

What are the principal materials used in domestic architecture, John? (Houses are made of wood, brick, and concrete. The foundations are of stone and cement in most cases.) (Show slides of houses.) In religious architecture, Edward? (Most large ellurches are made of brick or stone.) (Show slides.) In industrial architecture? (Many factories are made of brick; some, of corrugated metal.) (Show slides.) In educational architecture, William? (Modern schools are constructed of brick.) (Show slides.) In commercial architecture? (Stores and skyscrapers are made of brick, stone, eement blocks, etc.) (Show slides.) Have you ever wondered how man can erect buildings so high? What do you think is done to make possible the building of skyscrapers, Albert? (They are strengthened with columns, beams, a strong foundation, and steel structure.) What is the process involved in strengthening concrete known as, John? (This process is known as reinforcing the concrete.) (Show slides of buildings partly constructed; reinforced concrete and steel frame construction.) The modern reinforced concrete wall is thin as compared with the walls of ancient

Since we are going to design some buildings of our own, it is necessary that we become acquainted with floor plans. (Show blue prints of various plans; discuss.)

Assuming that we are all architects, I am going to divide the class into five groups. Each group will make designs for a particular type of architecture; as, doinestic, religious, educational, industrial, and commercial. Between now and the next lesson I want you to notice particularly the buildings appropriate to your assignment; buildings that will help you in your plans.

THE JUNIOR HIGH SCHOOL PROGRAM

LESSON IV. MAKING OUR PLANS AND SKETCHES FOR MODEL BUILD-INGS.

Materials. Paper, peneils, art gum, etc.

Today we are going to design buildings which we shall later construct.

In making these drawings, there are some important things to remember. Of what must we be careful in our designs, Charles? (Perspective and proportion are important.) John? (We must plan for the colors to be used on the models.) Edward? (We should decide whether our buildings are to be simple or elaborate.) During the past few days we were to take particular notice of buildings around us. This may be of great help to us in making our plaus. The many illustrations and slides that we have seen will also influence our creations. Do not hestitate to refer to these aids.

(During the remainder of the lesson the pupils are encouraged to make their sketches. The teacher will give help when necessary.)

3. FORMING PRODUCTS STAGE

LESSON V. MAKING OUR MOREL BUILDINGS

Materials. Sketches, eardboard, seissors, paste, wood, and other

During our last lesson we made designs for model buildings. We shall finish these designs during the first part of the lesson today. We are then going to start the construction of these models. How many of you have Christmas gardens at holiday time? Did you ever notice how the houses that you use are made? I have a strip of cardboard with which I shall show you the process of putting these model buildings together.

(Following the demonstration, materials are passed and the model making is begun. During the rest of the period the teacher assists the children individually in their work.)

LESSON VI. CONTINUING THE WORK ON OUR BUILDINGS

Materials. Sketches, cardboard, seissors, pastc.

Today we shall continue the work on our model buildings. Let us try to have them ready for the finishing touches during the next lesson. I have here a model of a house that I constructed since our last lesson. Notice how it is made. (Discuss.)

(During the rest of the lesson the children work on their models, the teacher helping them with suggestions when necessary.)

LESSON VII. COMPLETING OUR MODEL BUILDINGS

Materials. Paint and hrushes.

We have made very good progress in constructing our models up to this time. Today we shall have to try to complete them, painting them.

There are many different materials that we can imitate in the painting of these buildings. We can indicate bricks or shingles or elapboards for the houses; for the churches, brick or stone; for the industrial, commercial, and educational buildings we might imitate brick or stone or concrete blocks. If we are careful in painting our models, we can make them look realistic. (During the rest of the period the teacher aids the children with suggestions.)

We are going to exhibit and criticize the finished buildings during our next lesson.

4. APPRECIATION STAGE

LESSON VIII. EVALUATING AND DISCUSSING THE FINISHED PRODUCTS

Aims. To appreciate architecture, ancient and modern; to discuss and evaluate products.

We have today completed our designs and models and shall discuss each one's work. We shall arrange the models and designs in groups: educational, industrial, religious, commercial, and domestic.

What do you notice about the churches, John? (They look similar to the pictures and slides that we had in class.) That is outstanding. (The designs are clean and neatly laid out. Also, the buildings are well constructed.) Do you like the color of paint used? (Yes. It looks like real stone.) As far as proportion and realness are concerned I would say that the buildings are well done. The ones who worked on these models have certainly put to use the principles and knowledge

acquired earlier in this course. (A similar discussion follows with each of the remaining four types of buildings.)

I think that it would be a good idea to select the best buildings and make a model city. We could exhibit this to the whole school. We can develop this project during the next lesson.

QUESTIONS FOR DISCUSSION

- 1. How would you proceed to arrange a sequence of lessons in art for a junior high school, using the preliminary diagram outline?
- 2. What would be your procedure in planning the individual lessons?
- 3. Do you think it would be advisable to arrange the entire sequence of lessons and to write out all of the lesson plans in advance of actually undertaking the carrying on of a unit of teaching? Explain.
- 4. To what extent do you think the teacher should feel obliged to follow the plans made in advance?
- 5. In planning units of teaching for a junior high school, how would you guard an manning units of seasons the information side at the expense of the activity phase of the subject?

6. How would you proceed to organize and develop a course of study for a particular junior high school grade? For an entire school system?

REFERENCES

BOOKS FOR THE TEACHER

- Cheney, Sheldon, A World History of Art, The Viking Press, Inc., New York, 1943.
- D'Amico, V. E., and others, The Visual Arts in General Education, Report of the Committee on the Function of Art in General Education, for the Commission on Secondary School Curriculum of the Progressive Education Association, D. Appleton-Century Company, Inc., New York, 1940.
 - Faulkner, Ray, Edwin Ziegfield, and Gerald Hill, Art Today, Henry Holt and Company, Inc., New York, 1941.
 - Guggenheimer, Richard, Sight and Insight, Harper & Brothers, New York, 1945. MacDonald, Rosabell, Art as Education, The Study of Art in the Secondary Schools, Henry Holt and Company, Inc., New York, 1941.
 - Moholy-Nagy, L., The New Vision, W. W. Norton & Company, New York, 1938. Munro, Thomas, and others, Art in American Life and Education, Yearbook of the National Society for the Study of Education. Public School Publishing Company, Bloomington, Ill., 1941.

BOOKS FOR THE STUDENT

- Bartlett, Francis G., and C. C. Crawford, Art for All, Harper & Brothers, New York, 1942.
- Bement, Alon, Figure Construction, rev. ed., Gregg Publishing Company, New York, 1939.
- Hiegeleisen, J. I., and E. J. Busenbark, The Silk Screen Printing Process, 2d ed., McGraw-Hill Book Company, Inc., New York, 1941.
- Carlyle, Paul, and others, Learning to Letter, McGraw-Hill Book Company, Inc., New York, 1939.
- Cheskin, Louis, Living with Art, A. Kroch & Son, Chicago, Illinois, 1940.
- Cramlet, R. C., Fundamentals of Leathercraft, The Bruce Publishing Company, Milwaukee, 1939.
- Craven Thomas, Men of Art, Simon & Schuster, Inc., New York, 1931.
- Craven Thomas, Modern Art, Simon & Schuster, Inc., New York, 1934.
- Doten, Hazel R., and Constance Bouland, Fashion Drawing, How To Do II, Harper & Brothers, New York, 1939.

THE JUNIOR HIGH SCHOOL PROGRAM

- Downer, Marion, Discovering Design, Lothrop, Lee & Shepard Co., New York, 1947.
- Ellis, Clifford and Rosemary, Modelling for Amateurs, The Studio Publications, Inc., New York, 1939.
- Faulkner, Herbert W. Woodcarring as a Hobby, Harper & Brothers, New York,
- Gaba, Lester, On Soap Sculpture, Concerning Its History, Technique and Style, Henry Holt and Company, Inc., New York, 1935.
- Gardner, Helen, Understanding the Arts, Harcourt, Brace & Company, Inc., New
- Genauer, Emily, Modern Interiors, The World Publishing Co., Cleveland, 1942.
- Guptill, Arthur L., Pen Drawing, Watson-Guptill Publications, Inc., New York,
- Hake, Herbert V., Here's How, Row, Peterson & Company, Evanston, Ill., Harris, R. G., and Girolamo Piccoli, Techniques of Sculpture, Harper & Brothers,
- Hillyer, V. M., and E. G. Huey, A Child's History of Art, D. Appleton-Century
- Kainz, L. C., and O. L. Riley, Exploring Art, Harcourt, Brace & Company, Inc.,
- Kniffen, H. R., Masks, Manual Arts Press, Peoria, Ill., 1931.
- Lee, K. D., Adventuring in Art, D. Appleton Century Company, Inc., New York,
- Longyear, William, Type Specimens, Watson-Guptill Publications, Inc., New
- Mills, Winifred H., and Louise M. Dunn, Marianettes, Masks and Shadows, Doubleday & Company, Inc., New York, 1927.
- Nicolaides, Kimon, The Natural Way to Draw, Houghton Mifflin Company,
- Price, Matlak, So You're Going to Be an Artist, Watson-Guptill Publications, Inc.,
- Quarles, G. G., Elementary Photography, McGraw-Hill Book Company, Inc.,
- Rice, W. S., Block Prints, The Bruce Publishing Company, Milwaukee, 1941.
- Roos, F. J., Jr., An Illustrated Handbook of Art History, The Macmillan Company, Smith André, The Scenewright, The Macmillan Company, New York, 1927

- Teague, Walter D., Design This Day, Harcourt, Brace & Company, Inc., New York, 1940.
- Thurston, E. L., High-lights of Architecture, Bridgman Publishers, Pelham, N.Y., 1930.
- Van Doren, Harold, Industrial Design, McGraw-Hill Book Company, Inc., 1940.
 Van Loon, H. W., The Arts, Simon & Schuster, Inc., New York, 1937.
- Wallace, C. E., Commercial Art, 2d ed., McGraw-Hill Book Company, Inc., New York, 1939.
- Watson, Ernest W., Color and Method in Painting, Watson-Guptill Publications, Inc., New York, 1942.
- White, Mary, How to Make Pottery, Doubleday & Company, Inc., New York, 1926.

Art Courses in the Senior High Schools

HE senior high school art course is characterized by the continuation of the general art study of the junior high school, followed by intensive concentration on certain specific fields. There should be no break between the instruction offered in the junior high school and that offered at the senior high school level.

AIMS

- To arouse and preserve an interest in art, through significant information and activity experiences.
- 2. To enlarge and enrich the aesthetic experience through exercise of the creative impulse and imagination, by practice in expression, and through the development of skill by training in design.
- 3. To furnish vocational and educational guidance in art, making suitable allowance for individual differences.
- 4. To discover pupils who are talented in nrt mud to provide special training for them.

To enable the student to employ the principles of design and good taste in his everyday life, an effort should be made to develop in him ability to recognize art and to understand meaning and value in a work of art; to desire to possess only artistic things; to be able to discuss intelligently the significance of art products; to be able to choose, combine, and arrange objects artistically; and to compose artistic arrangements. An effort should also be made to inculcate an understanding of the historic development of art and to give an insight into its vocational and recreational possibilities.

Plans for the senior high school art program should embrace both general, technical, and vocational education, whether these types of work are carried on as a part of the general school program or are housed in separate huildings.

As pointed out by Fansler,1 "Art should certainly not exist in a school curriculum merely as a cultural asset; simply as a means for teaching that unteachable quality inadequately called 'appreciation.' Aesthetic sensitiveness has to be preserved, not inculcated; trained, not planted. It is probable, though not wholly proved, that the enjoyment of art is a function of intelligence, and if so, its chief requirement for growth is use. To segregate art in a given room and on a given day in the life of a school is to divorce it from reality. It should be a part of school surroundings, met with in the daily round of activity and particularly in all those courses which have to do with the study of man and of his patterns of thought."

Gearhart2 informs us that "because of timely interests and the way life runs today, senior high school students are sensitive to art values. Success comes to the art teacher who is in sympathy with

publication of the Board of Education of the City of Los Angeles, California, 1938.

Fansler, R. M., An Index to the Set of Fine Arts Teaching and Reference Material for Secondary Schools, Carnegie Corporation, New York, 1933. *Cearhart, May, "Experience in the Arts," contained in Your Children and Their Schools, a

AN ART-MAJOR CLASS AT SOUTHERN HIGH SCHOOL IN BALTIMORE WORKS AT THE WALTERS ART GALLERY ONE PERIOD EACH WEEK THROUGHOUT THE SCHOOL YEAR.



the tendeocies of the times and who marches with his students in a mutual investigation and discovery of art's place in contemporary progress. Art activities grow out of the attitude on the part of teachers and students toward their own needs and interests and the contributions and limitations of the community. General attention and interest are stimulated through various agencies, such as art in architecture, art in industry, art io movies, art in shop window displays, art in the press and in magazines, art for leisure, and art in the hasic courses of the school."

COURSES

In a study of the art education situation in high schools of the United States made by The Federated Council on Art Education, Klar' found that the most popular courses offered, judged by the reports of high school graduates, were those in general art, poster, design, art appreciation, in the order named. Included in the list of the 20 subjects of courses reported, the following may be enumerated as typical examples: costume design, show-card writing, interior decoration, architectural drawing, crafts, sketch, clay modeling, cartooning, portrait, art appreciatioo, art history. The various courses were grouped by the committee under the following categories: (1) design and crafts, (2) representation, (3) art appreciation.

The classification presented herewith, based on that of the Federated Council on Art Education, is more extensive and should therefore be of practical value in determining which courses should be offered in a particular senior high school. It will be noted further that the classification fits in rather closely with the art information experience classification which is treated somewhat fully in Chap. IV.

Klar, W. II., Art Education in High Schools, pp. 63-61, The Federated Council on Art Edueation, New York, 1935,

ART COURSES IN THE SENIOR HIGH SCHOOLS

1. ART APPRECIATION

Composition and design

Theory and practice of

design

General art Art history

2. PAINTING

Pencil sketching
Pen-and-ink drawing
Water-color painting
Oil painting
Figure drawing
Etching
Illustration

3. SCULPTURE

Clay modeling (including casting in plaster and cement)

Wood carving Stone carving

4. Architecture

Home planning
Interior decoration
Community planning
Architectural drawing
Landscape architecture

- 5. ART OF THE THEATER
 Stagecraft
 Scenic design
- Arts and erafts
 Shop sketching
 Costume design
 Textile design
 Millinery design
 Jewelry design
 Art metalwork
 Block printing
 Leatherwork
 Ceramics
 Furniture design
- 7. COMMERCIAL ART
 Art in salesmanship
 Costume illustration
 Advertising art
 Poster
 Show-card writing
 Sign painting
 Pictorial photography

Handeraft.

SEQUENCE OF COURSES

It is suggested that where but one course in art is to be offered in the senior high school it he general in character, unless there are good reasons to the contrary, such as the needs of the community for work in a particular differentiated field. Such a course would provide experiences that would doubtless be of most value to the great number of students who would elect to take it. Because of the present importance attached to industrial and commercial interests, it would be well to keep these interests in mind in planning a course of study in general art or art appreciation for the first year of the senior high school period. Such a course might be planned either to represent the entire high school offering, as would be necessary in the small high school, or it could be made the basis of further differentiated courses in the large high school where there would be a considerable number of pupils desiring to go on with their art studies. For this group the inauguration of an art major curriculum should make it possible for them to take more advanced courses in the commercial or industrial art fields or in architecture, painting, or sculpture.

The typical well-halanced orientation course offered in a senior high school should emhrace all divisions of the art field, including art appreciation, painting, sculpture, architecture, industrial art, and commercial art. The various subdivisions appearing in the outlines given on page 193 and others should all have a place in the course of study. The heginning course should also serve to prepare the student for the special phases of the field that are to follow. The general outline for such a course, with marked leanings, however, toward industrial and commercial interests, is given at this point, in order to present a pattern which should he helpful to the teacher who would plan his work along somewhat similar lines.

A SENIOR HIGH SCHOOL ORIENTATION COURSE

AIMS OF THE COURSE

The general aim of this course is to teach the appreciation of those elements of design which underlie the creation of all beautiful manmade things. The special aims include:

- The intellectual development of the student in the power to imagine or invent.
- 2. The emotional development of the student in the ability to use discriminative judgment, either as producer or ns consumer.
- The acquirement of habits of thoughtful and expressive execution.

Lantern slides and other illustrative material are used extensively throughout this course. In the first term, the illustrations collected by teacher and pupils relate for the most part to industrial products for home use and decoration, such as china, silverware, pottery, textiles, and costumes; and to primitive and historic designs, as Indian, Egyptian, Greek, and Roman. In the second term, the illustrations are related to Oriental, European, and modern design. Japanese stencil designs, and Chinese rugs. Actual works of art replace the illustrations wherever possible, and field trips are made to the museums of art, the art school, and to factories and commercial shops. Homework, such as collecting illustrations, is recommended.

FIRST TERM

Elements of Composition. The nature of elements which condition design. Line. Movement of line. Speed of movement. Refinement of line. Mass. The designer's net or plan. Planning of masses: measure, rhythm, balance. Development of complicated masses. Refining of masses. Color: hue, value, chroma. Psychology of color. Color

balance. Variation. Its creation in line and mass. Development of strength, simplicity, and interest.

Principles of Design. Rhythm-agreeable and uninterrupted movement. Balance-no element attracts undue attention. Bisymmetrical or formal. Occult or informal. Measure—the relative proportions of the parts of a design, principality and subordination. Functionthe nature and use of the product. Fitness to the purpose for which the product is designed.

Structural Unity in Decorative Construction. Mass in harmonious proportion. Refinement of outline or contour-curves of force where curves are a part of the natural form of the article. Surface areas brought to artistic unity through subdivision into minor areas of

Enrichment of the Surface. The product must be suited to decoration. The decoration must be based on the structure of the form—subordination of decoration to construction. The treatment of the decoration must depend upon the material.

Unit One: Design in Decorative Construction

Ancient and Modern Conceptions of Industrial Art. Changing conceptions of industrial art and their causes. Greek ideal and Renaissance ideal compared. Machines introduced by the industrial revolution unable to comply with the Renaissance ideal because of the lack of individuality. Development of modern standards stressing accordant shape. Handcrafts replaced by manufacture by power machine.

ART COURSES IN THE SENIOR HIGH SCHOOLS

Designer and workman no longer the same person. Advantages and disadvantages. Early inartistic factory products, due to poor machines and bad taste, give way to beautiful articles based on new standards. Questions and activities.

Presenting the Principles of Design. Greek belief that beauty rises from the artistic qualities of objects. Obviousness of governing principles of design. Balance as concerned with the forces of weight and attraction. Symmetrical balance. Unsymmetrical balance. Rhythm as concerned with movement. Harmony, fitness to purpose, as result of rhythm and balance. Unity obtained by bringing together all parts of a design. An application of principles in home decorations, in costume, in other fields of artistic expression. Questions and activities.

Conditions that Control Designs. Utility and appearance, important factors in determining form. Purpose as a guide to design. Standardized designs in tools, machines, and other products. Evolution of design in familiar industrial forms. Sincerity in design. Products appear what they are. Fashion in design possible in object whose function is independent of its shape. Fashion and beauty of design. Questions and activities.

Design in Decorative Construction. Color as a decorative factor in industrial products. Mass. Contour of outline, Surface. Laws of decorative construction employed in analyzing manufactured objects. Questions and exercises. Elevation drawing of pieces of furniture or other objects of good design which pupil has in his home.

Activities. Illustrate the above outlines with superior or inferior

examples¹ of: Household equipment. Furniture. Table utensils including china, silver. Ceramics. Textiles. Tools. Machines. Typewriters. Automobiles. Locomotives.

General experiences in the use of line—line composition in a square or circle showing space relation and variation. Medium may be charcoal, hlack ink, or water color.

Unit Two: Design in Decorative Enrichment

Design in Decoration. Design and representation compared. Mural decorations and paintings. Decorative use of form; texture and color in machinery, utensils, and textiles. Surface enrichment. Geometric motifs. Fauna and flora in design. Man-made objects. Good and had decorations. Questions and activities.

The Relation of Design to Material. Artistic worth of the genuine and adequate. Woods, metals, clay, and textile materials. Sham ornamentation inconsistent with artistic worth. Surface coverings. Discrimination in design. Nonaesthetic influences. Questions and activities.

Illustrate the above outline with superior or inferior examples of: furniture, woodwork, ceramics, textiles, metalwork, book covers.

Provide decoration for tin or wooden box, using motifs of historic periods under discussion. Stress structural lines of circle, the

Examples take the form of illustrative material brought in by teacher and pupils. They may be designated.

designated.

IT DEVOLVES UPON THE TEACHER TO HELP THE CHILD TO REALIZE WHEREIN LIES APPROPRIATENESS IN THE USE OF MATERIALS. Claywork and Wearing, Secondary School Level, Los Angeles, California, Public Schools.

eoncentric circles and radii. Boxes should be furnished by pupils. Marshmallow and other candy boxes and even baking powder and other cans may be found appropriate for transformation through decoration.

Additional experiences in the use of line. Line compositions. Landscape. Representations other than landscape.

Unit Three: Home Decoration and Furnishing

Taste reflected in the decoration of the home. Elements to be considered in home decoration. Floor and walls. Hangings. Lighting. Selection and arrangement of furniture. Period furniture. Reconciling the discordant in home furnishings. Pietures. Questions and activities.

Illustrate the outline with pictures of: eolonial architecture-Homewood, Baltimore; room from colonial mansion, Metropolitan Museum of Art, New York; Mount Vernon and other colonial houses, exterior and interior; examples of architecture as they appear in the current newspapers; house plans; floor plans-map of rooms in n house; clevations—proportion of wall spacing, doors, and windows; designs for living room, dining room, bedroom, kitchen, bath; accessories such as furniture, rugs, curtains, and draperies, lighting fixtures, clocks, ceramics, pictures and picture frames.

Experiences in Color. An elevation drawing of a room, showing furniture and hangings, in color, to apply the knowledge of all design

Experiences in Mass, A problem in line, and light and dark, in one of the following: an abstract design, landscape, a flower composition, a textile design, a pottery design.

I Medium may be charroal, black pencil or ink, or neutral water color.

UNIT FOUR: ART IN COSTUME

Art in Dress. Basic forms of dress. Fashion. Artistic control of fashions by the individual. Questions and activities.

Historic Costumes. Illustrate with authentic material: Egyptian, Assyrian, Cretan, Archaic Greek, later Greek, Roman, European of the Middle Ages, eighteenth-century European, American colonial. A comparison should be made between historic examples and their application in modern costumes.

Modern Costumes. From fashion magazines cut examples to illustrate the following:

Morning: appropriate or inappropriate costume for school, business, home, sports.

Afternoon: appropriate or inappropriate form.

Evening: appropriate or inappropriate form for informal dinner, banquet, theater or opera, informal dance, formal dance, informal wedding, formal wedding.

Color as an Element in Costume Design. Colors becoming or unbecoming to the individual. Hue, value, chroma. Color quality. Texture of materials, Psychology of color. Color balance.

Write a short paper on the essentials of art in costume, and use the following outline: Suitability of the costume as to age and figure. Fitness to season and to time of day. Fitness to the occasion. Simplicity of design. Comfort. Nentness. Quality of material. (Special emphasis to be placed upon suitability of designs to material and suitability of both design and material to use.)

The making of a poster using a house as the motif, combining it with appropriate lettering. (Students are to be encouraged to make a collection of clippings from newspapers and other periodicals, illustrating the principles of design studied.) Questions and activities.

UNIT TEN

The abstract, the nonobjective, superrealism or surrealism, and constructionism—these are types of modern art that will influence the art education of tomorrow. We are today living in an experimental period with an unlimited supply of material for the creative artist to release into pleasing forms and shapes.

Abstract art is based on a recognizable object with which the artist allows his imagination to play. Nonobjective art enables the artist to play with geometric forms and brilliant colors, to produce effects that are often more exciting than those found in nature. The artist does not have to depend on recognizable objects as in the abstract type. Superrealistic art deals with the expression of one's subconscious mind. In constructionism the artist plays with different materials, such as wood, glass, wire, metals, nails, pins, thread, and cloth. He arranges and rearranges the materials until the design is pleasing to the eye. These compositions seem reminiscent of the dream of an architect or an industrial designer.

SUPPLY THE STUDENT WITH ADEQUATE MATERIALS AND ALLOW HIM TO PLAY WITH AND ARRANGE THEM INTO PLEASING COMPOSITIONS AND HE WILL SOON PASS BEYOND THE REALM OF REALISM INTO THE CREATIVE WORLD. Product of the New Art by Ruth Putzel, Betly Hoopes, and Babtie Hallwook, Students of the Tenth Grade, Forest Park High School, Baltimor, Marghand.

Abstract art, nonohjective art, superrealism, and constructionism are rapidly forcing realism into the hackground. A copy of nature, no matter how well planned, is not a true creation. Copies of nature are being left to the camera, so the artist will have time to develop the creative fields of art, in which there is more room for the expression of individual feelings. The object of the new art is not to refer to particular objects hut rather to ideas and moods.

Examples of the new art rarely, if ever, have titles assigned to them. The observer is allowed to use his imagination and to name the creation whatever he wishes. The compositions may suggest the different movements of music, the rhythm of the dance, the heauty of nature's forms, the forcefulness of machinery, or the weird suhconscious thoughts of the dreamer. No two persons will interpret this art in the same way. That is why it is alluring and nontiring. The new art can he appreciated by anyone who has an appreciation for good design, line, color, and mass.

The new types of art have a place in the classroom. Carefully planned exhibits of adult contemporary art and of students' work constitute one successful way of educating the future citizens. The school art lahoratory should he a workroom wherein the student can experiment. Supply him with adequate materials and tools and allow him to play with the materials and arrange them in pleasing compositions, and the young artist will soon pass he yond the realm of realism

THE TEACHER SHOULD KEEP CONSTANTLY IN MIND THE EVERYDAY ART EXPERIENCES THAT BOYS AND GIRLS ENGAGE IN AT HOME, IN THE SCHOOL, AND IN THE COM-MUNITY. Caricatures. Derigued in Pasteboard, Cut Out, Suspended, and Photographed Against a White Background for School Publication by Senior High School Students, Los Angeles, California, Public Schools.



into the creative world. By this method the instructor may escape from the stereotype of art problem.

SENIOR HIGH SCHOOL DIFFERENTIATED COURSES

Following the general orientation course, which should provide considerable experience in way of review as well as new experiences for the pupils, senior high schools should offer one or more special courses leading to advanced higher studies in the art school or college. The range of these courses should embrace the fields of art appreciation, and painting and sculpture, as well as the industrial and commercial fields. Courses may be offered in each of these specific hranches as such, or in any subdivision of each, as conditions in the community

Art appreciation may thus be offered as a special course or there may be advanced courses in composition or design, in general art, in art history, or in some other special hranch of the appreciation or history of art. Painting may be taught in such a way as to embrace tlic entire field of the subject, or an advanced special course may he provided in pencil sketching, pen-and-ink drawing, water-color painting, oil painting, figure drawing, or illustration. There may be a special course called sculpture, planned to explore the entire field, or a special course may be provided in modeling, in wood carving or in some other particular phase of the sculptor's art. Architecture may be offered as a course, or special courses may be offered in such phases of architecture as home planning, architectual drawing, interior decoration, community planning, landscape architecture, stagecraft,

An all-embracing course in industrial art may be offered or there may be one or more special courses in the arts and erafts, shop sketching, costume design, textile design, millinery design, art metalwork and jewelry, leatherwork, ceramics, or furniture design. Commercial art may be offered as a complete course in itself, or there may be courses in such branches of this field as art in salesmanship, costume illustration, advertising art, poster, show-card writing, sign painting, and pictorial photography.

PROCEDURES

The senior high school art teacher should plan his work to meet as directly as possible the needs of the boys and girls whom he serves. He should keep constantly in mind the everyday art experiences that they engage in at home, in the school, and in the community. If he will make careful note of these experiences, the list will help him greatly in planning units of work that will function in the lives of his pupils.

He should also make a careful list of appropriate units of teaching that come within the range of the field to be covered. Some typical examples of such unit topics, selected at random and contributed by senior high school teachers are as follows: Ceramics, Streamlining, Staging a Play, Art of the Homelands, A School Mural, Costume through the Ages, Explorations in Color, Masks, Rearranging My Room, The Modern Home and Its Grounds, Lettering in Advertising, Art of the American Indian, What We Can Learn from Greek Art.

The accompanying outline, which was planned and used by a senior high school art teacher, will be found to embody the systematic organization and development that have been discussed in this and the preceding chapters.

¹ Collings, Ellsworth, Supervisory Guidance of Teachers in Secondary Schools, The Macmillan Company, New York, 1934.

A SCHOOL MURAL

A SENIOR HIGH SCHOOL UNIT OF TEACHING

SEQUENCE OF LESSONS

Lesson I. The History of the Mural from Egypt to the Present Time

Lesson II. General Scheme and Details of Composition (Literature Theme) Lesson III. Thumbnail Sketches of Ideas and Possibilities of Composition

Lesson V. Making the Cartoon, the Outlines of the Design in the Size of the

Lesson VI. Class Criticism of the Cartoon

Lesson VII. Color and Method of Application

Lesson VIII. Finishing Details

Lesson IX. Appreciation Lesson on Completed Mural

Lesson X. Scraphook Relating to the Lives and Works of Mural Painters

THE LESSONS

Lesson I. The History of the Mural from Egypt to the Present

Aims. To acquaint the child with the earliest murals, to make him conscious of the antiquity of this method of decoration, and to place a definite value upon murals seen around him.

Materials, Illustrations of murals secured from newspapers, magazines, and books on art, paper for taking notes to be placed in notelooks, and art textbooks with available material.

Discussion. "Mural painting concerns that branch of art which has for its object the covering or dressing of a building so that its purpose may be sweetened or intensified by the decoration." Brangwyn. Its purpose is to enhance rather than to weaken architectual structure.

We must consider wall decoration from two viewpoints—that of fitness and that of adornment. Probably the best way to study

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these two phases is to study the history or evolution of the mural. How many of you thought that the mural was a product only of the twentieth-century artists? (Several hands raised.)

SENIOR HIGH SCHOOL ART UNIT TOPIC: A SCHOOL MURAL

Infarmation		Activity	
General	Technical	Directed	Creatice
Employment of mural paintings by ancient	Mural decoration adapted to purpose of theme	modern mural decora	•
Egyptians Paintings on Greek vases suggestive of	Design harmonious with architecture	tion: lantern slides and prints	Sketching from life
mural decoration Nature forms used by	Various parts of com- position coherent	raphy, etc., relating to	
Romans to fill wall spaces Abstract motifs em- ployed by Saracens	Themes appropriate to: church; library; railway atation; ballroom; school		drawn to scale
in their arabesques Renaissance mural painters: Giotto: Fra	Thumhnail sketches Scale used for sketch 2	Sawyer; Sherlock Holmes	
Angelico; Gozzoli; Michelangelo Puvis de Chavannes	inches equal to 1 foot Distribution of interest in the mural	Measurements for mu- rals, made on the walls	Color schemes
and mural painters of France Modern English paint-	Proportions and anatomy of the human	Establishing of centers of interest in sketches	Criticism of color used in curtoons
er Frank Brangwyn American muralists: John La Farge;	figure Meaning of "cartoon"	Sketching the human figure	The completed mural
Violet Oalley; Ezra Winter; Thomas	Enlargement of draw- ings by means of	The cartoon	Criticism of the painting
Benton Mexican muralists: Orozco; Rivera	squares Border designs Orchestration of colors	Transferring the design Finishing the painting	Serapbook of mural

Egypt. It seems that the general opinion is that murals were not used in ancient times. However, we can trace the use of them back to the

THE INTEGRATED SCHOOL ART PROGRAM

early Egyptians, who employed the mural painting to convey meanings through the use of symbols. These people were the most logical designers, for their adornment had its origin in nature, and its meaning was associated with religious beliefs. They never sacrificed clarity of meaning to realism; hence their custom of representing the human figure partly in profile.

(Show pictures of examples of Egyptian paintings in tombs.)

The art in ancient Mesapotamia, Babylonia, Chaldea, Assyria, and Persia was in some respects similar to that of Egypt.

Greece. The Greeks painted the structural features of their temples and even colored their sculpture, but less is known of their painting. We can learn something about their wall paintings from their beautiful painted vases. Their compositions must have been quite realistic. As seen in the Parthenon, the figures used in the pediments seem to have little organic rhythm. The Greeks were therefore among the lesser contributors in the field of mural decoration.

Rome. The Romans employed decorative composition of human, animal, and plant forms, especially used for the filling of long and narrow spaces, such as that on the pilasters. Pompeian decoration is light and playful and reminds one of the French rococo patterns of the eightrenth century.

Mosaic, for the most part, took the place of mural painting in Byzantine times.

(Show more illustrations, if it is possible to secure them, especially those of church interiors.)

Mohammedan. The Alkambra at Granada is a good example of Saracenic decoration of the thirteenth century. So are the mosques

of Jerusalem, Damascus, and Cairo. Clean-cut, romantic splendor characterizes the mural decorations which are in the form known as arabesques. They were principally in low relief. These designs were formal and abstract, since the religion forbade the use of natural forms. Gold was used with a blue background, with red and yellow.

(Show more illustrations.)

The Renaissance. Tapestries and stained-glass windows served as mural decorations during the Renaissance. A natural return to realism occurred. The artists of this period must be considered as wall painters primarily. Their object was to create an illusion of space.

Giotto—Descent from the Cross, in the Arena Chapel, Padun, and paintings at Assisi, Italy

Fra Angelico—The Annunciation, Church of Cortona, Italy Gozzoli—Journey of the Magi, and other paintings in the Riccardi Palace in Florence

Michelangelo-Decorations in the Sistine Chapel, Rome

Eighteenth Century. Mural painting reached a perfect consistency in eighteenth-century French decoration. Wall paintings were, however, rather in disfavor. Boucher and Chardin were not very successful in their attempts at wall decoration. They had little sense of wall space and of making a decoration fit into it.

Nineteenth Century. As a result of the industrial and political revolution, mural painting tended to disappear. Commercial manufacture almost entirely replaced handieraft in decoration.

Individual efforts were made to restore mural decoration. Puvis de Chavannes, the French painter, attempted to exclude any tricks of illusion and to preserve one's consciousness of the wall. He gave several centers of interest and bound the composition together with a landscape setting, securing flatness by using blues and green-grays. His decorations in the Pantheon in Paris are representative of his best work as a decorator.

Modern. Modern conditions have, until very recently, not encouraged a true style in mural decoration. Two American painters, John Singer Sargent and Edwin A. Ahbey, attempted to solve the problem. Other recent muralists are Albert Besnard of France, Frank Brangwyn of England, John La Farge and Violet Oakley of America. At the present time, Jose Clemente Oroceo and Diego Rivera, Mexicans, are producing murals that are successful from the decorative standpoint, as are Thomas Benton and Henry Varnum Poor, Americans.

(Show examples of all the American and modern mural decorations possible.)

Are there any questions you would like to ask concerning mural paintings in general? Will you summarize the main details of the history of mural painting for us, John? From the notes taken during the class period, write a summary for your notebooks of the history of the mural.

Tomorrow we shall take up the general scheme and composition of the mural painting.

LESSON H. GENERAL SCHEME AND DETAILS OF COMPOSITION (LITERATURE TREME)

Aims. To set up criteria applicable to the school mural; to decide upon an appropriate theme for a mural to be placed in the school library; to plan the placing of the mural so that it will show up to the best advantage; to decide on the best possible proportions of the

Materials. Blackboard, scratch paper, illustrations of murals.

Discussion. Before we can go ahead and plan the type of mural needed for our library, there are certain general rules governing composition which we should first discover.

- The design should be conceived in the spirit of the architecture which the mural painting is to decorate.
- 2. The design should form a connected whole, so that the eye passing from one wall to the other will travel by pleasant successive stages.
- 3. Colors need not be authentic; for example, if a certain historical character wears a red cloak, for the sake of the general scheme it may be painted gray or some other color.
- 4. Mural painting should be treated as if it were "a page in a book of poetry" and not a "chapter in a tome of history."
- 5. The interest of the design should be distributed over the whole surface, so that the mural performs its function of decorating the larger architectural unit as a pattern should.
- Every form of design is justifiable, provided it keeps within the spirit of the surrounding architecture and the purpose of the building.

Where would you look for a jazz pattern in a mural? (Music hall, ballroom.) Where would one be likely to find a mural on transportation? (Office of railway company.) On the birth of Jesus? (In churches.) What type of mural would you be likely to find in a library? (Some pictures connected with books, as: famous characters from books; the history or evolution of the book, as in the Congressional Library in Washington; or possibly a series of paintings on some phases of industry, agriculture, or commerce.)

Which of these would be most suitable for our library? Consider the size of the room and the available wall space. Remember that some types of architecture do not call for mural painting. (Make a plan of the library on the hlackboard.) Since there are only two available spaces where a mural could possibly fit, it would seem practical to limit ourselves to a story that could be easily told in two spaces, probably taking the well-known characters from famous books.

Let us make a list of some of the characters we could use. (Use scratch paper. Each pupil names as many as be can.)

John Silver Roh Roy

Tom Hawkins Sherlock Holmes

Rohinson Crusoe Ulysses
Tom Sawyer Tiny Tim
Hiawatha Scrooge
Roderick Dhu Hamlet

Cinderella Little Women—Meg, Jo, Beth, Amy

Othello The Three Musketeers
Lucy Mannette Alice in Wonderland

Doctor Mannette Snow White

Before the rough sketches can be planned, we must know the exact size of the spaces into which the murals are to fit. We will have a committee to take care of that point for us, and tomorrow we shall ask for its findings. (Appoint a committee of three.)

Assignment. Increase your list of characters and decide upon those that are most important—the ones you will want for your composition.

¹ For a comprehensive list of characters from fection see Bailer, H. T., The Magic Realm of the Arts The Davis Press, Worcester, Mass., 1923.

LESSON III. THUMBNAIL SKETCHES OF IDEAS AND POSSIBILITIES OF COMPOSITION

Aims. To assemble the possible ways in which the theme may be treated; to select from these one that is approved by all for the use of everyone, and in this way to have a clear idea of what the finished composition will be like.

Materials. Unprinted newspaper (large sheets), peneils, rulers, erasers.

Discussion. First we will have a report of the Committee on Measurements to give us the exact dimensions of the two spaces. (Dimensions to be given in exact feet and inches.)

Will you read your list of characters, Mary, and then tell us which ones you wish to use for your centers of interest? (Have several members of the class read the lists, and write the names on the blackboard.) Since there is so much difference of opinion as to the centers of interest, let us work up a set of rules for judging of the importance of these people who are going to have conspicuous places in our completed work. (Compile a list on the blackboard from pupils answers which may include three groups.)

- 1. The most loved characters in fiction
- 2. The characters who feature most prominently in high school literature
- 3. The most outstanding characters from the viewpoint of romance and bravery

After agreeing upon approximately six centers of interest, three for each panel, we are quite ready to go ahead with the other details of composition. Decide upon the figures you wish to group with each center of interest. Sometimes, when needed, one figure may partially cover another.

Procedure. (Provide each pupil with a large sheet of unprinted newspaper for making sketches.) Work up several rectangles to the desired scale, allowing 1 inch in the rectangle to equal 6 inches in the finished mural. Then plan various sketches in these spaces, remembering that two are needed for the entire composition. Have a continuity of thought extending from one composition to the other. (Pupils work on these ideas until shortly before the end of the period.)

Have pupils place their sketches on bulletin hoard for class criticism. With the help of the class, select the one from the group that has the most pleasing arrangement, the hest continuity of lines, and the most pleasing subject.

LESSON IV. SKETCHES FROM LIFE

Aims. To gain skill in drawing the human figure with direct emphasis on correct proportions; to learn how to mass in darks and lights to show most effectively.

Materials. Large sheets of drawing paper, charcoal, erasers, pastels, colored chalks, and drawing boards.

Discussion. How many of you like to draw figures better than anything else? (Several.) How many of you feel that you are poor at figure drawing because you rarely achieve a likeness? (More hands mised than last time.)

Is there anyone here who would be disappointed if he discovered at the end of this course that he could draw figures as well as John La Gatta? (No hands raised.)

Fine! Everyone is interested in the human figure as a study in art. Everyone, at some time or other, has expressed a wish to be able to draw the figure better than he can now. Let us look at a few fine figure drawings to be found in our current periodicals. (Show various well-proportioned sketches of figures in different positions, all simple in outline. Call attention to the masses of dark included.)

A student is requested to stand at ease¹ before the class. Using him as a model, the teacher asks the following questions:

How many heads tall is Ralph?

Does his hip line divide his body in half?

How long are his arms?

Are his knees half way from his hips to his feet?

What proportion is the width of his body to its height?

How long are his feet?

What are the proportionate distribution of the features of the face? (These questions are for general class discussion.)

Procedure. (Pupils are requested to thumbtack the paper to their drawing boards. They should be given a choice of three mediums—charcoal, pastel, and colored chalk. While pupils are arranging supplies, the teacher places the model in a good pose—one in which is found continuity of line. Possibly, the model is bending over to pick up some object from the floor.)

We shall have several 3-minute poses, each followed by a rest period. Various members of the class will act as models from time to time, so that each of you will have some poses to sketch from. Use shadings whenever heavy shadows are found. Color may be used if you wish. (Each pupil should make at least four sketches.)

Will each of you now turn your paper over and on the unused side enlarge one of your sketches from memory, putting in whatever lines enlarge one of your sketches from memory, putting in whatever lines enlarge one of your sketches from memory, putting in whatever lines and masses you think are necessary. (As each pupil finishes his draw-

When children pose, they should be asked to relax and should never be kept standing without support except for a very brief period.

ing, he places it on the front bulletin board for criticism. Pupils are called on in turn to criticise some other pupil's work constructively.)

LESSON V. MAKING THE CARTOON

Aims. To learn how to enlarge drawings; to learn the meaning of the word cartoon; to gain skill in figure drawing.

Materials. Large sheets of unprinted newspaper; erasers; yardsticks; large, soft-lead pencils; tracing paper and canvas mounted on a stretcher; masonite, homasote, or other suitable material.

Discussion. (The thumbnail sketches made by the pupils in a previous period are placed on the bulletin board for criticism.)

Will each one of you examine every sketch critically? Do we have several centers of interest in each panel? Do the two panels seem to fit together? Do the separate figures tie up nicely? Are the figures proportioned well? What suggestions can you make to improve the sketch you like best? (After the class decides upon a particular drawing, it should be perfected in every way possible. If need be, the figures can be interchanged for continuity.)

What would be our best way of enlarging these thumbnail sketches on the large sheet of unprinted newspaper? Divide the thumbnail sketch into squares and the larger sheet or cartoon into the same number of squares, to correspond. Of course, the latter will be much larger.

Procedure. (The large sheets of unprinted newspaper are placed somewhere in the room where the students will have no difficulty working on them. The thumbnail sketches are tacked up so that all students working upon a particular part of the cartoon can easily see the working drawing. A small margin for a border is allowed around the entire area.)

As soon as the cartoon has been "squared off" we may begin our task of sketching in the various outlines of the composition. Each of you will have one or more figures to sketch in. Follow the squares on the small sheet and you will have no difficulty in getting your figure in the correct position and posture. (Pupils continue working until cartoon is completed.)

LESSON VI. CLASS CRITICISM OF THE CARTOON

Aims. To perfect the line drawings of the cartoon; to make the pupils conscious of continuity in line arrangement and of well-spaced areas; to transfer the completed drawing to the final material for applying color.

Materials: Same as for Lesson V.

Discussion. (Tack the completed cartoons up so that they may easily be seen by the entire class. It would be well if they could be placed in the positions on the library wall that they will occupy when finished.)

Does the enlarged drawing look as well as the thumbnail sketch? Do the masses hold together? Are there any seemingly vacant places? Do the centers of interest stand out? Are the other figures subordinated? (The entire class will take part in this discussion and offer suggestions for corrections. These should then be made upon the cartoon.).

What type of boundary or border do we need to hold our composition in the restricted area? Do we want nn elnborate or a simple border? (Show illustrations from books on types of borders.) The plainer the border, the less it will detract from the composition itself. Let us have parallel lines arranged at unequal distances npart.

Let us now try several arrangements of parallel lines to find the one most suitable in width and attractiveness. (Send several pupils to the blackboard to work. The others may work at their seats.)

Which of all these samples do you think will serve our purpose the best? (Class indicates preferences.)

Procedure. Two or three members of the class will draw the border around the cartoon, while the others are preparing the canvas or board for the transferring of the completed drawing. The material to be worked on should be cut the exact size. Place carbon paper on top of board and then the cartoon in place over this. Use tacks to keep the cartoon from slipping or moving about. Use a large, softlead peneil for tracing. Be sure all the lines have been gone over before removing the cartoon. Now, we shall be ready for the application of color in our next lesson.

LESSON VII. COLOR AND METHOD OF APPLICATION

Aims, To secure colors that harmonize; to secure "orchestration" of colors; to complete the line drawing by the addition of color.

Materials. Canvas or board with the cartoon traced on it, oil paints of all the necessary hues, large and small bristle brushes, turpentine, linseed oil, paint cloths.

Discussion. The colors we choose will either make or mar our line drawing. Therefore, it is very important that we choose colors that are "orchestrated," or that hold together as the various musical instruments in an orchestra do. Otherwise, the painting will look restless and patchy. Notice the effect of colors one upon the other in these murals by Michelangelo, Chavannes, Gauguin, Orozco, Rivera, Poor. (Show examples of their work.) Each of the artists

seems to use one color more often than any other. This is his dominant hue. We, too, must have certain colors repeated throughout our murals. The portions of the wall that are in the shadow will need a different treatment from those that are in the direct sunlight.

Procedure. Let each of us choose colors for his particular character. Remember the place it fills in the mural. Try to have the colors in our figures harmonious. (Allow pupils a few minutes to do this.)

Now let us first apply our colors to the eartoon. (Each person quickly colors in his section.)

(Class criticism follows this.)

Do the colors hold together?

Do we have bright colors in the shadows?

Do we have our paint distributed well?

Do the colors hold each other in the same plane?

What color shall we use for our background that will make our figures stand out and at the same time hold them together?

(When satisfactory colors have been chosen, each pupil begins to work on his own particular section. Oil paints should be used. They should be well mixed. One pupil should do the entire background.)

LESSON VIII. FINISHING DETAILS

Aims. To complete the mural.

Materials. Same as for Lesson VII, with wooden molding for

Discussion. (When paintings have been completed, place them in their respective places in the school library.)

What suggestions can you offer to improve the colors, line composition, and darks and lights in these murals, George? Mary? John?

(Drawing of the figures.)

(Choice of colors.)

Look carefully at every character depicted. Can you readily tell whom each is intended to represent? Do you think other people will recognize them? (Yes.) Do all the colors need to be authentic? Are they? (No. In design, we may use any colors we want, provided we have a good art reason for using them.)

If you were planning another mural on literature, would you choose the same characters, Jane? (No. I would make my designs more abstract and less realistic.) What is your opinion of the border? (The three colors used—red. blue, and green—tie up very nicely with the colors in the composition.) How many of you find yourselves examining murals critically and analyzing them? (Many.) Do you appreciate them more than you did before you made this one? (Much more.)

Lesson X. Scrapbook Relating to the Lives and Works of the Mural Painters

Aims. To learn the life history of well-known mural painters; to be able to distinguish good murals when seen; to develop good taste in the mounting of material and the arrangement of notebooks.

Materials. Cardboard, monk's cloth, glue, paste, colored paper, scissors, illustrations, ink, pens, and pen holders.

Discussion. All of you have been making collections of repro-

A CERTAIN HONESTY OF APPROACH AND A DEVOTION TO FUNCTIONAL EXPRESSION ARE COMMON TO BOTH HANDI-CRAPTEMAN AND WORKER FOR THE MACHINE. Boys Operating Cutact Machine in Commercial Art Course, Boys I ocational School, Bultimore, Maryland.



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ductions of mural paintings and as many of the portraits of muralists as you could find. It seems only appropriate that you should make the book to paste these in, instead of buying one. Now there are several different types of books that may be made. (Show samples of several kinds—large mounted type, loose-leaf type, portfolio type.)

Each of you may choose the type of book that you would like to make. Decide upon the size you want. Do not make it smaller than 10 by 13 inches. For suggestions as to method of planning, use illustrations on the front blackboard. (Chalk diagrams of three different type of books are placed on front blackboard.) After the size has been decided and the cardboard cut, cover the cardboard with monk's cloth and miter the edges. Place binder's tape along the one edge for strength. Place eyelets in it if you are to make a looseleaf book. If it is to be bound, place a narrow strip of cardboard between the two cover boards and on top of a broad piece of binder's linen. Place another piece of linen on top and miter the edges. If it is to be of portfolio type, hold all the pieces of cardboard together with binder's linen. If you desire, you may steneil a decorative design on the front cover. Place lining of colored paper over raw edges of material on inside of the cover boards. Plan a title page suggestive of the material to be placed in the book. Mount all illustrations with the widest margins on the outside and at the bottom -never in between the pictures. Label all illustrations neatly.

THE BEST CREATIVE RESULTS ARE THOSE SECURED WHERE THE ACQUISITION BY THE PUPILS OF SIGNIFICANT INFORMATION GUARANTEES THAT THE EXPRESSION SHALL BE THE ADEQUATE EMBODIMENT OF IDEAS. High School Students Working at the Silk-Screen Process.



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Look up information on the artists and their work, and letter this neatly in ink near the illustrations. All the sheets should of course have uniform margins.

THE FOUR-YEAR SEQUENCE IN ART

When art is to be offered in the secondary school as part of a technical curriculum, then it is advisable that a course representing the entire field of art be made available as a tryout general subject in the ninth grade. The curriculum itself should, moreover, present a balanced offering of art experiences, and provision should be made, if possible, for the boys and girls enrolled in it to specialize in a single field, such as commercial art or industrial art, if this should seem desirable. Students planning to continue their studies in art school or college should, of course, complete all the courses. Although the art subjects included may be regarded as constants, the academic subjects

THE SECONDARY SCHOOL ART CURRICULUM
JUNIOR HIGH SCHOOL LEVEL
FIRST YEAR

(ninth grade)

('ourses	Periods a week	Number of weeks
English (6	40
Foreign language I	6	40
Algebra General art.	6	40
World history	6	40
Music	. 5	40
Physical education	1	40
Home economics	2	40
Industrial arts	2	40
	35	40

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SENIOR HIGH SCHOOL LEVEL

Courses	Periods a week	Numbe of week
SECOND YEAR		
(tenth grade)		
English II	5	40
Geometry Painting	5	40
b ,		1
Sculpture	10	40
Biology, foreign language I or II		40
Home economics or industrial arts		40
Music	1	40
Physical education	2	40
	30	
THIRD YEAR		
(eleventh grade)		
English III	5	40
Foreign language I, II, or III, or physics,*		
math. III, modern European history (select	1	
two)	10	80
Commercial art	10	40
Industrial art 1		
Music	1	40
Physical education	2	40
	28	
FOURTH YEAR		
(twelfth grade)		
English IV	5	40
Forcign language II or III)	5	40
Forcign language II or III Chemistry* or Math. IV		
Theater art	10	40
mobile at the second	_	40
Inited States history	5 g	40
hysical advertion	ī	40
Jusic	28	

^{*} Pupils who have not had biology in tenth grade must take either physics or chemistry before graduated

THE INTEGRATED SCHOOL ART PROGRAM

should be regarded as variables, since local conditions and the schools which pupils may plan to enter after graduation from high school should have an influence over the selection of the subjects other than art. It will he noted in the pattern curriculum as outlined that "art appreciation," as such, is to he stressed in the courses in history. The constant art courses of the technical curriculum are: ninth grade, general art; tenth grade, sculpture and painting; eleventh grade, commercial and industrial art; twelfth grade, architecture and theater art.

QUESTIONS FOR DISCUSSION

- 1. How would you proceed to arrange a sequence of lessons in art for a senior
- 2. How would you proceed in planning the individual lessons?
- 3. Would it be advisable to arrange the entire sequence of lessons and to write out all the lesson plans in advance of undertaking the unit of teaching?
- 4. To what extent do you think the teacher should be obliged to follow the plans
- 5. In planning units of teaching for a senior high school, how would you guard against overemphasizing the information side at the expense of the activity
- 6. How would you proceed to organize and develop a senior high school course of
- 7. How would you proceed to organize a four-year high school technical curricu-

REFERENCES

See also Chap. X on Books on the Arts

ART EDUCATION

Counts, G. S., The Social Foundations of Education, Chap. VIII, "Art," Charles

ART COURSES IN THE SENIOR HIGH SCHOOLS

Dalcroze, Jaques, Eurhythmics, A. S. Barnes and Company, New York, 1930.Norton, J. K., and M. A. Norton, Foundations of Curriculum Building, Chap.XIV, "Art," Ginn & Company, Boston, 1936.

ART APPRECIATION

- Chandler, A. C., Story Lives of Master Artists, Frederick A. Stokes Company, New York, 1929.
- Goldstein, Harriet, and Vetta Goldstein, Art in Everyday Life, The Macmillan Company, New York, 1932.
- McMahon, A. P., The Art of Enjoying Art, Whittlesey House, McGraw-Hill Book Company, Inc., New York, 1938.
- Neuhaus, Eugen, World of Art, Harcourt, Brace & Company, Inc., New York, 1936.
- Opdyke, G. H., Art and Nature Appreciation, The Maemillan Company, New York, 1982.
- Parker, D. H., The Analysis of Art, Yale University Press, New Haven, 1926. Weitenkampf, Frank, How to Appreciate Prints, Charles Scribner's Sous, New York, 1925.

ART IN GENERAL

Craven, Thomas, Men of Art, Simon & Schuster, Inc., New York, 1931.

Craven, Thomas, Modern Art, Simon & Schuster, Inc., New York, 1935.

Gardner, Helen, Art through the Ages, Harcourt, Brace & Company, Inc., New York, 1936.

Hagen, Oscar, Art Epochs and Their Leaders, Charles Scribner's Sons, New York, 1927.

CRAFT

Ackley, E. F., Marionettes, Frederick A. Stokes Company, New York, 1929. Faulkner, H. W., Wood-carring as a Hobby, Harper & Brothers, New York, 1934. Hamilton, E. T., Hondieraft for Girls, Harcourt, Brace & Company, Inc., New

York, 1932.

Kreymborg, Alfred, Puppet Plays, Samuel French, Inc., New York, 1926.

Kreymborg, Alfred, Puppet Plays, Samuel French, Inc., New York, 1926.

Lankes, J. J., A Woodcut Monual, Henry Holt and Company, Inc., New York, 1932.

Polk, R. W., Essentials of Linoleum-block Printing, Manual Arts Press, Peoria. III., 1927.

THE INTEGRATED SCHOOL ART PROGRAM

Tangerman, E. J., Whittling and Woodcarving, Whittlesey House, McGraw-Hill Book Company, Inc., New York, 1938.

DESIGN

- Bailey, H. T., and Ethel Pool, Symbolism for Artists, Creotice and Appreciative, The Davis Press, Worcester, Mass., 1925.
- Best-Maugard, Adolio, A Method for Creative Design, Alfred A. Knopf, Inc., New York, 1927.
- Hambidge, Jay, The Elements of Dynamic Symmetry, Coward-McCann, Inc., New York, 1926.

DRAWING

- Beem, F. M., The Human Head, The Bruce Publishing Company, Milwaukee, 1931.
- Bridgman, B. G., Constructive Anatomy, Bridgman Publishers, Pelham, N.Y., 1925.
- Garfield, F. O., You Can Draw (Figure Drawing), D. Appleton-Century Company, Inc., New York, 1936.
- Guptill, A. L., Freehand Drawing Self-taught, Harper & Brothers, New York, 1933. Finchot, Ben, Female Form, Bridgman Publishers, Pelham, N.Y., 1935.

PAINTING

- Barnes, A. C., The Art in Painting, Harcourt, Brace & Company, Inc., New York, 1928.
- Carnegie Corporation, Catalogue of Selected Color Reproductions, 2 vols., Raymond and Raymond, Inc., New York, 1936 (for reference only).
- Cortissoz, Royal, The Painter's Croft, Charles Scribner's Sons, New York, 1930. Pennell, Joseph, Etchers and Etching, The Macmillan Company, New York, 1935.

SCULPTURE

- Talt, Lorado, The History of American Sculpture, The Macmillan Company, New York, 1924.
- Toft, Albert, Modeling and Sculpture, J. B. Lippincott Company, Philadelphia, 1910.

ARCHITECTURE

Barnes, E. A., and B. M. Young, Children and Architecture, Teachers College, Columbia University, New York, 1932.

ART COURSES IN THE SENIOR HIGH SCHOOLS

- Ferriss, Hugh, The Metropolis of Tomorrow, Ives Washburn, New York, 1929.
 Field, W. B., Architectual Drawing, McGraw-Hill Book Company, Inc., New York, 1943.
- Lamprey, L., Wonder Tales of Architecture, Frederick A. Stokes Company, New York, 1927.
- Tallmage, T. E., The Story of Architecture in America, W. W. Norton & Company, New York, 1927.
- Waffle, H. W., Architectural Drawing for High Schools, The Bruce Publishing Company, Milwaukee, 1939.
- Wright, F. L., Modern Architecture, Princeton University Press, Princeton, N.J., 1931.

INDUSTRIAL ART

- Holme, Geoffrey, Industrial Design and the Future, The Studio Publications, Inc., New York, 1935.
- Nutting, Wallace, Furniture Treasury, 2 vols., Old America Company, Framingham, Mass., 1928.
- Read, Herbert, Art and Industry, Harcourt, Brace & Company, Inc., New York, 1935.
- Rutt, A. II., Home Furnishing, John Wiley & Sons, Inc., New York, 1935.
- Varnum, W. H., Industrial Arts Design, Scott, Foresman & Company, Chiengo, 1916.

COMMERCIAL ART

- Goudy, F. L., Elements of Lettering, Printing House of William Edwin Rudge, Inc., New York, 1922.
- Matasek, R. J., Commercial Art and Design, The Bruce Publishing Company, Milwaukee, 1931.

Chapter VIII

The School Museum

The concational work being carried on by museums outside the public school system has done much to focus the attention of school administrators and teachers on the educational value and importance of collections of various kinds of illustrative objects and materials and on the desirability of forming and maintaining exhibits of them within the schools.

In addition to showing the material lent by the museums, schools are also sometimes able to build their own collections. These may be given a room or a central display area in the school building or they may be distributed through the classrooms. Such exhibits help to clarify the subject matter presented in the course of study and to make instructional material more vital and interesting to the pupils. Thus they provide much-needed vicarious experience for the pupils, and through the careful selection and arrangement of the things shown, give aesthetic pleasure and encourage the development of taste.

THE MUSEUM AND THE SCHOOL

The old idea of a museum was that it is a place for preserving valuable collections of objects of art or of nature for examination primarily by scholars and connoisseurs; the modern idea is that it is a storehouse of such material, to be studied or enjoyed by the masses, and sometimes distributed to educational centers for study purposes and replaced in the museum in rotation.

Most museums have gradually increased their educational offerings, until today some of them may rightly be considered as educational institutions. They often maintain special reference libraries that are of great educational value. In short, they have come to assume functions that but a few years ago were not associated with museums at all. Of all the museums in the United States. the Metropolitan Museum of Art in New York probably has the most complete organization for its educational activities. Since its influence has been so great in suggesting procedures to the other museums of the country, a list of its more important activities is given in detail. Its present offering includes: A staff of instructors to interpret its collections; lending collections of lantern slides, photographs, maps, charts, easts, reproductions of paintings, statues, and objects of craftsmanship; lectures on Saturdays and Sundays, and in special series; publications, bulletins, leaflets, historical catalogues; bureau of information regarding the museum, its work, and its collections: story hours for children; complete file of photographs of all objects on display and duplicate copies for sale; special rooms for the close study of objects removed from the galleries for the purpose; easels and stools and locker rooms for drawing materials; classrooms equipped with stereopticon lantern, available for teachers and school groups; service department for workers in manufacturing establishments; study bours for sales people and buyers from the department stores; publicity service for trade magazines and newspapers; special exhibits of their own work by school pupils, manufacturers, and designers; lectures for groups of teachers and for high school pupils,

related to classes in art, social studies, science, and other curriculum subjects.

In the hope of giving its collections and services greater value in remote regions of its city, the Metropolitan Museum of Art has, according to Richard F. Bach, Director of Industrial Relations, organized neighborhood circulating exhibitions consisting of varied material from several departments and grouped under the titles: China and Japan; Arms and Armor; Ancient Egypt, Its Life and Art; Oriental Prints and Textiles; European Textiles and Costume Figures; Ancient Greece and Rome; and The Near East.

The encouragement of the museum's educational program by the schools generally takes the form of utilization of such opportunities as the museum affords. In one community, for example, a conference is arranged between the superintendent of schools and the director of the museum at the beginning of the school year. At this conference a plan for the year's work is set up. Subsequently, conferences are held with the director of art education in the school system and the school principals, at which details for the year's program are definitely mapped out. In order that the museum may adequately meet the needs of the school, it is important that its educational services shall be in harmony with and, in so far as possible, synchronized with the public school curriculum.

"In most large population centers," as pointed out by Bach,1

BOY AND GIRL VIEWING AN EXHIBITION OF "CHILD ART FOR SCHOOL AND HOME DECORATION" AT THE SCHOOL MUSEUM OF THE DEPARTMENT OF EDUCATION.

[&]quot;museums can no longer claim that they serve the people of their Bach, Richard F., "Neighborhood Circulating Exhibitions," The Museum News, Vol. 17. No. 12, Dec. 15, 1936.



cities, for not enough of the people visit museums to substantiate the statement. By carrying museum material and museum scrvice to the districts, regions, or neighborhoods which constitute any large city, museums may on the other hand reach many to whom-as surely as to those who are privileged to come to its galleries—it owes the opportunity to profit by the information and enjoyment to be found in its collections. Such extramural service is truly museum extension.

"For this type of work the hranch library system is an admirable hut not an entirely adequate model. The difference lies in that the museum material shown in hranch huildings or under other cooperative auspices should preferably he original, while the library deals primarily with duplicates."

The need for school-owned collections of illustrative material is felt most keenly in the localities not reached by museum service. Museum services are, however, being gradually extended over everincreasing urban areas such as those surrounding Baltimore, Buffalo, Chicago, Cleveland, Milwaukee, and New York, thus helping the schools in such areas to develop their own display projects. This partnership of museum and schools is making for improved school displays, through which the museum is enabled to reach a larger audience of students, parents, and teachers.

THE MUSEUM IN THE SCHOOL

The solution of this entire problem obviously lies in the establishing of school museums that shall be capable of displaying the loaned material more effectively, and consequently of cooperating fully with the specialized museums where such exist and in the forming of collections within the school. Any school that is large and progressive enough to have a library should also have its own museum. The inauguration of a school museum program should not require the setting aside of a room specifically for this purpose, although in some localities this might be desirable. Floor space, suitable wall space and display cases can be provided in the classrooms and in the halls where the proper lighting obtains. Suitable lighting, specially prepared walls, and built-in display cases should be included in the plans for new huildings.

Such provision for the school museum is generally superior to special rooms, because it makes possible the placing of exhibits where they will be most useful and because it is more economical of space. The carrying out of this plan would locate the art exhibit near the art, industrial, commercial, and home economics departments of the school; the history exhibit near the history department; the natural history exhibits near the science department.

Display cases can he huilt into the walls that separate the classrooms from the hallways, the cases heing provided with fixed plateglass show windows flush with the walls of the hallway and opening into the classrooms of the curriculum departments concerned. The doors opening into the classrooms should be lined with corkboard to make them effective for wall displays, and there should be adjustable shelves of plate glass for showing small objects of various kinds. The dimensions of these built-in cases should be similar to those of the standard portable display cases used in the museums of art.

In initiating a school museum program it should not be necessary to increase the number of persons on the faculty. Since art teachers, hecause of their extensive preparation in design, as well as the nature of their work, are already experienced in arranging and labeling exhibits, it is suggested that the art teacher or head of the art department in the school he designated by the principal to act as chairman of the school museum committee, which would be composed of teachers or heads of other departments.

The work of this committee should include such tasks as the following: Designating suitable places in the building for showing the exhibits; determining what adaptations or slight modifications would have to be made in the building to make effective displays possible; deciding what additional equipment and supplies would be required; determining the scope and nature of the exhibits; deciding where to horrow or otherwise obtain the collections of things to be shown; working out a tentative schedule of exhibits for the year.

Once a school museum has been established, it is suggested further that subcommittees made up of pupils, each subcommittee working under a committee member from the faculty, be appointed to cooperate in huilding the collections and maintaining the museum generally.

In Baltimore, Maryland, three schools have developed museum programs that have come to play a very important part in the life of the school community. The exhibits shown have elicited favorable comment from many visitors. The programs referred to are those of the Gwynns Falls Park Junior High School, the Patterson Park

> ART FORM IN SCULPTURE IS DEPENDENT ON THE APPRO-PRIATENESS OF THE IDEA FOR SCULPTURAL EXPRESSION, THE MODE OF EXPRESSION EMPLOYED, THE CLEARNESS, FORCE, AND BEAUTY OF EXPRESSION, AND THE DESIGN AND TECHNIQUE USED IN SHAPING AND FINISHING THE MATERIAL. Sculptured Portrait in Coarse Sandatone, by Adolph Dioda, Tuellih Grade, Aliquippa High School, Aliquippa, Pennsylvania. As Exhibited in the School Massaum.



THE INTEGRATED SCHOOL ART PROGRAM

Junior-Senior High School, and the Forest Park Senior High School.

The Gwynns Falls Park Junior High School maintains eight large display cases built into the wall opposite the two side-nisle entrances to the school auditorium. These cases are illuminated with elongated, frosted electric lamps so placed that they cannot be seen from the front. A different department is placed in charge of the assembly and the school museum each month and this responsibility is so rotated that each department has charge about every two years. Every teacher in the school has a part in getting up the exhibits. Each departmental chairman serves as the chairman of the assemblies and

ASSEMBLY-MUSEUM SCHEDULE FIRST SEMESTER

Date	Grade	Assembly	Museum	Броплот
Sept. 10 Sept. 10 Sept. 17 Sept. 17 Sept. 19 Oct. 1 Oct. 8 Oct. 12 Oct. 29 Oct. 29 Nov. 5 Nov. 19 Dec. 3 Dec. 10 Dec. 17 Jan. 7	All 7B 7th Girls 9th 7th 8th 9th	Homerooms Activity program Motion pictures Motion pictures Speaker Play Play Motion pictures Motion pictures Motion pictures Motion pictures Motion pictures Musical program Musical program Musical program	Museum Hobby Show Commercial Guidance Mathematics	Room chairman Club chairmen Mr. Irving Mr. Irving Mr. Irving Mrss McSherry History department History department History department Mr. Irving Mrs. Burns Miss Bennett Miss History Miss Bennett Miss History Miss Between Miss Peters
Jan. 21 Jan. 28		Athletic Association Homerooms	Music	Mrs. Davis Mr. Aaronson Mr. Denaburg

THE SCHOOL MUSEUM

SECOND SEMESTER

Date	Grade	Assembly	Museum	Sponsor
Feh. 5	7th	Activities		
Feh. 12	9th	Motion pictures	Art	Miss Brainard
Feh. 19	8th	Motion pictures	1	Miss Brainard
Feh. 26	7th	Motion pictures		Miss Brainard
Mar. 5	9th	Speaker	Physical	Miss McSherry
Mar. 12	7th	Dramatic Cluh	Education	Miss Kellemen
Mar. 19	8th	Dramatic Cluh	13ddeutibh	Miss Kellemen
Apr. 2	9th	Dramatic Cluh	i i	Miss Kellemen
Apr. 9	7th	Glee Club	1	Miss Bennett
Apr. 16	8th	Glee Cluh	Geography	Miss Bennett
Apr. 23	9th	Glee Cluh	Goog-apily	Miss Bennett
Apr. 80	7th	Marionette show	ŀ	Miss Duval
May 7	8th	Marionette show	1	Miss Duval
May 14	9th	Marionette show	Shops	Miss Duval
May 21	7th	Student Council	LLops	Mrs. Thompson
May 28	8th and 9B	Student Council		Mrs. Thompson
June 4	Girls	Athletic Association	Teachers	Physical education
June 11	Boys	Athletic Association	Hobbies	department Physical education department

exhibits for which his department is responsible. Pupils are invited to contribute to the exhibits anything that they can, but the teachers are responsible for deciding upon the topic and for weaving around it the exhibits for the month.

The teacher responsible for maintaining the two museum cases set into the wall that separates the principal's office from the corridor, on the first floor of the Patterson Park Junior High School building, believes that "individual things assume more meaning when they are grouped with other things." The exhibits at this school aim (1) to keep before the student body ideas worthy of consideration; (2) to

THE INTEGRATED SCHOOL ART PROGRAM

make the exhibit cases conform at all times with the basic idea which the principal is concentrating upon; (3) so to arrange and display the materials shown that everyone who views the exhibits will be conscious of beauty, as well as of theme; (4) to endeavor to create an interest among the students concerning the objects or ideas on display.

A year's school museum schedule observed at Patterson Park is as follows:

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Sept. 17. Display of the trophy cups of PPHS (both cases being used)
Sept. 27. Display of library books (Case I) Primitive tools (Case II)
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Oct. 4. Hi-Y Club (Case I) B2 Club (Case II)

Oct. 11. Athletic Club (Case I) Taxidermy Club (Case II)

Oct. 18. Library Council-Stenographic Club Oct. 25. Navy Week-Halloween

Nov. 1. Patterson Players (both cases)

Nov. 8. Home economics department (both cases)

Nov. 15. Girl Scout Club-Guidance Club

Nov. 22. Thanksgiving idea (both cases)

Nov. 29. French Club-Robert Frost Poetry Club

Dec. 6. Mail early (Case I) Correct way of wrapping Christmas packages

Dec. 13. Christmas display (both cases)

Jan. 3. Art Club (Case I) Music Club (Case II)

Jan. 10. Radio Amateur Hour Club-Chef Club for Boys

Jan. 17. Knitting Club (Case I) Electrical Hobby Club (Case II)

Jan. 21. Marionettes (Case I) Dramatic Club (Case II)

In discussing the schedule for October, the teacher in charge gave the following explanation: "First, the trophy cups of our school occupied their rightful place for one week. Then they made way for the library books. It so happened at the time that our principal was attempting to establish a new habit at Patterson—the habit of spending the last 15 minutes of the lunch period either in the play

area or in quiet reading in the library. I thought that if the boys and girls knew some of the interesting books hidden on these shelves they might have a keener desire to join the group already there. We selected books for each type of interest and displayed them as artistically as possible-using their beautiful bindings to form the color scheme. The primitive tool display was arranged by a teacher of geography. It consisted of the collections owned by students of an 8B class and ran concurrently with this study in the classroom. Next came the Clean-up Campaign, and as this has always been under the sponsorship of the Hi-Y Club, we used this week to accomplish the goal of our campaign through this club and its associate, the B2 Club (Girl Reserves). The keynote of last week's activity was really football, but as a part of athletics; so we aroused school spirit by our athletic display. At this time the Taxidermy Club, having some new specimens, needed new members to help in the mounting of these highly prized animals and birds. A thought came that perhaps a display of a few of the birds and animals already beautifully mounted might provide an incentive for membership. It did. Some of the displays have been arranged by teachers; some by students; all have been interesting and have attracted quite a lot of favorable comment.

"Whenever a club or department does not feel that it can properly display its material and requests my personal attention, I gladly cooperate. There are so many ideas we may put across; so many things with which the children should make school contacts, that I wish we could have more display cases, where the ideas and objects created might be kept not for a week or for two weeks, but for many weeks, so that those interested might view not once, but many times, those displays of interest to them."

At the Forest Park Senior High School, according to the teacher

in charge, "The purpose of the school display cases include: (1) to display the work done in the extracurricular activities, and to create interest in, and (2) to bring before the pupils material from outside sources relating to the extracurricular activities. The extracurricular adviser, together with the pupils, is asked to provide an appropriate display for their work. Outside sources are also appealed to for displays that relate to the work at hand.

"The schedule of exhibits is arranged in May for the school year beginning the following September. An attempt has been made to allow each activity its choice of date so that the display will be spontaneous rather than forced. The displays are timed so that they will be seasonally appropriate, the football trophies being shown during the football season; the doll exhibit, just before the holidays."

It will be noted that the Forest Park schedule of exhibits for the present year, appearing on page 249, called for a change of displays every three weeks. Each teacher at the school is provided with a copy of the schedule, copies are posted on the school bulletin boards, and the schedule is also printed in the school weekly newspaper, The Press. Each year the museum at Forest Park is used to further some phase

MAINTAINING THE SCHOOL MUSEUM

School exhibitions of pupils' work are educationally desirable because children are always interested in seeing what other children can do. Containing examples of the best work done, such exhibits provide criteria whereby the child may judge his own products, thereby furnishing an incentive to creative expression and to higher work standards. School exhibits also help to keep visitors, especially the parents, informed of the progress being made by the children.

SCHEDULE FOR EXHIBITS SEPTEMBER—JUNE

Date	Case A	Case B	Case C
Sept. 14-27 Sept. 27-Oct. 15 Oct. 18-Nov. 5		Athletic tropbies Art	Athletic tropbies Art
Nov. 8-Nov. 30	Latin Club Book week	Model craftsmen (Foods) Home economics	Stamp Club Music
Dec. 1-17 Dec. 20-24 Jan. 3-21	Senior play tive Doll exhibit Typing awards	Camera Club Dolls of many lands (Clotbing)	
Jan. 24-Feb. 11	Mathematics Club	Home economics German Club	Radio Club Ping Pong Club
Feb. 14-Mar. 4 Mar. 7-25 Mar. 28-Apr. 15	Historical exbibit Garden Club Old books and doc-	Scout Club Old books and doc-	French Club Old books and doc-
Apr. 18-May 6 May 9-30 June 1-17	uments Hobby sbow Chemistry Club Typing awards	uments Hobby sbow Chess Club Art	uments Hobby show Four Square Club Art

Exhibits should be continuous, if possible, changing every week or two or on the completion of a teaching unit. When the school maintains a continuous exhibit of pupils' work, the things shown in the various schools become readily available for a community-wide exhibit at the school administration building, art muscum, or public library, at any time. Exhibits are often scheduled to begin on days when there are to be special visitors or a Parent-Teacher Association meeting.

The places for exhibiting should be prominent in the school building. A room adjoining the principal's office is sometimes appropriately used for general exhibition purposes. For a large temporary exhibit the gymnasium is also sometimes used. An exhibition room centrally located in the school is often desirable, but this is seldom available.

THE CENTRAL EXHIBIT

The general school exhibit may well be organized about one main topic or idea, for example, the work of one grade, a single lesson, a unit of teaching, a school subject such as art, geography, or science. At another time it might embrace original works of art or reproductions of art works, as, for example, sculpture, commercial art work, or erafts products of various kinds, and paintings. An exhibition of the work done by adult artists may be used to stimulate art appreciation.

The preparation and arrangement of exhibits should be carefully considered. Four thumbtacks or pushpins should be used in putting up each drawing or label. Exhibits should be so well prepared and arranged that they will in themselves constitute a work of art; the pupils should be given a large share in the planning and arrangement.

The entire exhibition should generally be accompanied by a large announcement or poster, and each individual exhibit should be clearly and artistically labeled. A simple standard label for identification purposes might be like the one reproduced on page 252. When pupils' work is to be shown to the best advantage, the label should include (1) the name or title of the work shown, (2) the medium used, (3) the name of the pupil who did the work, (4) the age and grade of the pupil, (5) the name or number and location of the school, (6) additional descriptive material when needed, and (7) the date. An example of such a label is reproduced on page 251.

The children themselves may sometimes be given a part in labeling their work by writing suitable descriptions. The following description accompanied a label for the water-color painting made by

a ninth-grade girl: "I chose the Glee Cluh as the theme for my work because I like singing and I thought it would make a nice picture to show the faces up close. My painting illustrates the Glee Club teacher at the piano, and a few girls who belong to the Glee Club practicing a song." A junior high school boy wrote the following description for his painting entitled Excursion Day, which he made with

The Department of Education			
Title of Exhibit			
Name of Child	Age		
School	Grade		
City	State		
Art Teacher			

transparent water color: "In my picture I was trying to show how it looks at the pier on an Excursion Day. We see many men, women, and children, heggers, peanut sellers, and halloon men. People are also to be seen running ahout the decks of the boat, and stevedores are husy hurrying boxes and packages along on their quaint little two-wheel handcars. I have never seen the boat called 'The Hanover,' because it is imaginary. All of the scenery shown in the picture I made from memory, but I have often seen such excursion boats at the pier near Pratt Street. I think Excursion Day is very interesting and colorful, and that is why I painted it."

The following explanation of an exhibit held at the Patterson Park Junior High School in Baltimore was prepared by the art teacher, Mr. Myer Site, mimeographed, and given out at the school art exhibition to parents of the pupils and other residents of the school

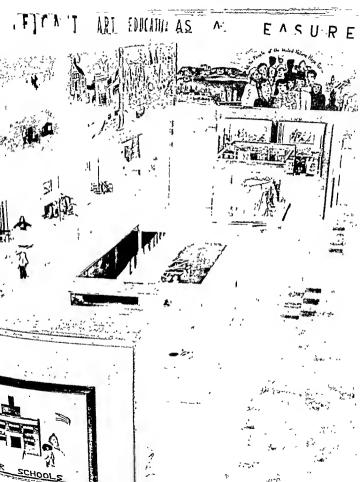
WINTER SPORTS IN SWITZERLAND A Chalk Drawing By John Waugh, Age 9, Fourth Grade Liberty Elementary School

In this picture a lourth-grade boy tried to express graphically what he had learned about Switzerland. A rhythmic disposition of forms, good spacing, and orderly arrangement all contribute to make this composition pleasing. The variety of colors and shapes has resulted in a picture which is not only a record of information which the child acquired in connection with the regular work of the fourth grade, but also one which possesses considerable merit as a work of art.

community attending. It helped those viewing the exhibits to understand better the work shown.

"Here is shown a keen alertness to experience, both visual and mental, an interest in life now, and what is more important, the growth of that interest. Art teaching recognizes the fact that boys

THAT "SOCIALLY SIGNIFICANT PRODUCTS OF CREATIVE ART MAY SERVE AS A RELIABLE MEASURE OF INDIVIDUAL GROWTH AND DEVELOPMENT" IS THE STATED PURPOSE OF THIS CONTINUING EXHIBITION OF CHILDREN'S WORK AT THE SCHOOL MUSEUM OF THE BALTIMORE DEPARTMENT OF EDUCATION.



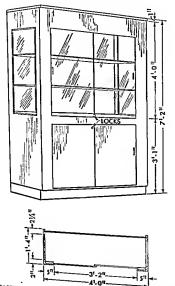


EXHIBIT CASE. This typical exhibit case is 4 feet long, 7 feet 2 inches high, and 16 inches deep. The lower part has plywood paneled sliding doors, the upper part is fitted with polithed plate-glass frameless sliding doors, polithed plate-glass ends, and polithed shelves of plate glass. The back of the case is covered with cork board. The case has a translucent ground glass ceiling

and girls have something 'to say' about the world around them. Their art is not a looking-back process but rather a looking-around process. Before beginning to put form into their expression, children must first learn to manipulate art materials. The first drawings serve as a foundation upon which to build. After this comes drawing in which symbols are used by the child; and these symbols are very significant to the child. For this reason adult standards should never be imposed nor should such standards be the criteria by which the child's work is judged. It was not the teacher's purpose to stress the technicalities of representation. It was rather a sincere interest in the growth and development of the child's sensitiveness to the art values in life, toward the development of self-formulated ideas into free spontaneous expressions. The only art principles stressed as the work developed were the filling of space and good contrast of light and dark. Color was considered as personal expression. Sometimes color was used by the child symbolically, sometimes it was used realistically. Learning took place through directed self-criticism and skillful questioning. Self-thinking, independent thinking, and its growth through individualistic expression is a purpose which extends throughout life; it is concerned with the development of creativeness. This purpose includes every child who is capable of thinking."

When exhibits other than those consisting of pupils' work are shown, they should be just as carefully labeled as when the work has been done by the pupils.

with fluorescent lights, completely wired with switch at base, ready for the feed lines to be connected by an electrician. Exterior sheet of plytocod is natural tood finish. The interior has a pastel lacquer finish, tinted to harmonize with the walls of the room. Providing multiples of this until should make possible the grodual development of a museum in any old school building that may have hall space available for the purpose.

MOUNTING EXHIBITS

A picture or other flat exhibit needs to be mounted when it appears to be crowded without a mat. Mounts are also necessary when an exhibit composed of many parts needs to he standardized with regard to size and sbape. Although the selection of colors for mounting is almost as wide in scope as the color chart, knowledge of a fcw simple rules for mounting should be of advantage. Since in mounting exhibits of pictures, either in the form of photographs, prints, or children's original work, it is important that the colors used shall be pleasing and satisfactory, the following suggestions will he found useful by the teacher in preparing displays.

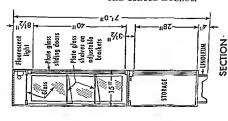
When a neutral mount is to he selected, it should he neither too light nor too dark. Generally it should he darker than the lightest values in the picture and lighter than the darkest values. However, white may sometimes be used effectively for bringing out the colors in a picture, and sometimes black is equally effective for the purpose.

When a standard or uniform mount is to he adopted for an entire exhibit, white is often most effective. Gray or silver used for uniform mounting is dead as compared with white. In spite of the fact that black seems to contrast well and to give vitality to the pictures mounted on it, this color, too, lacks the happy quality that white alone seems capable of giving to an exhibit. When a color hue is used for uniform mounting, the color most often chosen is brown or gray. When either of these colors is used, it should generally he approximately halfway between white and black, or of middle value.

It is not always advisable, however, to adopt or adhere to a uniform mount. A variety of colors may sometimes be used, each picture being mounted on the paper of its dominating hue. Thus

DOORS

400W



ELEVATION OF EXHIBIT CASE

The soils of the display room, which is the school's entrance hallreay, are lined with exhibit cases equipped with fluorescene

lighting and plate-glass shelres for showing three-dimensional objects and small pictures, and there are two additional freestand. ing cases centrally placed for showing larger objects. Above the wall cases is a cosk bulletin board extending along three sides of the room to provide space for shouring murals and frices. The entire museum is lighted indirrelly by Auorescrat lamps cou. ecaled behind the cork board. A spoilight is located above each of the freestanding cases.

14" PLATE-GLASS DOORS

a dominantly red picture may be mounted on red; a dominantly yellow picture, on yellow; a dominantly green picture, on green; and so on throughout the color circuit. Thus, all of the hues may under the proper conditions be used for mounts: red, yellow-red including orange and brown, yellow including gold, green-yellow, green, bluegreen, blue, purple-blue, purple. The color chosen should, of course, be the dominating hue of the picture and of a value lighter than the darkest parts in the picture and darker than the lightest parts; its strength and vividness, or ehroma, should be lower than that of the colors used in the picture; otherwise the mount might receive more attention than the picture itself.

BULLETIN-BOARD ARRANGEMENT

Bulletin hoards are for the showing of transitory or semipermanent informational material, rather than for the display of pictures that arc to serve as permanent decorations. In the arrangenent of a bulletin board, the vertical and horizontal lines of the room should, if possible, he emphasized, and diagonal lines avoided wherever possible. The structure of the bulletin board itself should be respected, no notices being allowed to project over its frame. Notices and posters should be so grouped that they seem to hold together in a

The entire display should be balanced, that is, each part of it should appear to keep its place in the design, and the whole to give a feeling of fitness, appropriateness, and satisfaction. The things on display may well be arranged with reference to a vertical center line which may be drawn very lightly in pencil. Such a line will serve as an axis. It should be of help in putting up the notices from day to day, as they are received from the central office and from other sources.

In arranging notices on a new bulletin board, or rearranging them on an old one, it is best to start by centering the first notice on the vertical center line, slightly above the exact center of the board. The second notice is placed directly below the first. Additional notices are placed to the left and right respectively, in order to produce and to retain a balanced arrangement. If an odd number of notices is to be posted, one can be placed on either side of the one that bas previously been centrally placed. If an even number of notices is to be displayed, an adjustment will have to be made to preserve the balance. This need not involve an entire rearrangement, however.

It is generally advisable to give the central place to one dominating notice or group of notices. This will make for improvement in the appearance of the display and it will also help to simplify the problem of preserving a balanced arrangement. It will not be necessary periodically to take down and rearrange the things put up for display, if this method of bulletin board arrangement is followed consistently, for the balance will be rectified continually as new notices replace the old ones. All exhibits should be taken down when they have served their purpose.

PICTURES FOR PERMANENT DISPLAY

Fine examples of art work done by children, properly framed and hung, make appropriate permanent decorations for schoolrooms and halls. Original paintings by adult artists should also be used if they are obtainable. In the absence of genuine works of the painter's art, good reproductions of them are of course desirable. Reproductions of mural paintings often make excellent wall decorations. Pictures should emphasize, rather than obscure, the surface of the wall space they occupy. They should be framed simply and appropriately and

a dominantly red picture may be mounted on red; a dominantly yellow picture, on yellow; a dominantly green picture, on green; and so on throughout the color circuit. Thus, all of the hues may under the proper conditions he used for mounts: red, yellow-red including orange and brown, yellow including gold, green-yellow, green, bluegreen, hlue, purple-blue, purple. The color chosen should, of course, be the dominating hue of the picture and of a value lighter than the darkest parts in the picture and darker than the lightest parts; its strength and vividness, or chroma, should be lower than that of the colors used in the picture; otherwise the mount might receive more attention than the picture itself.

BULLETIN-BOARD ARRANGEMENT

Bulletin boards are for the showing of transitory or semipermanent informational material, rather than for the display of pictures that are to serve as permanent decorations. In the arrangement of a bulletin board, the vertical and horizontal lines of the room should, if possible, be emphasized, and diagonal lines avoided wherever possible. The structure of the hulletin hoard itself should be respected, no notices being allowed to project over its frame. Notices and posters should be so grouped that they seem to hold together in a

The entire display should be balanced, that is, each part of it should appear to keep its place in the design, and the whole to give a feeling of fitness, appropriateness, and satisfaction. The things on display may well be arranged with reference to a vertical center line which may be drawn very lightly in pencil. Such a line will serve as an axis. It should be of help in putting up the notices from day to day, as they are received from the central office and from other sources.

In arranging notices on a new bulletin board, or rearranging them on an old one, it is best to start by centering the first notice on the vertical center line, slightly above the exact center of the board. The second notice is placed directly below the first. Additional notices are placed to the left and right respectively, in order to produce and to retain a balanced arrangement. If an odd number of notices is to be posted, one can he placed on either side of the one that has previously been centrally placed. If an even number of notices is to be displayed, an adjustment will have to be made to preserve the balance. This need not involve an entire rearrangement, however.

It is generally advisable to give the central place to one dominating notice or group of notices. This will make for improvement in the appearance of the display and it will also help to simplify the problem of preserving a balanced arrangement. It will not be necessary periodically to take down and rearrange the things put up for display, if this method of bulletin board arrangement is followed consistently, for the balance will be rectified continually as new notices replace the old ones. All exhibits should be taken down when they have served their purpose.

PICTURES FOR PERMANENT DISPLAY

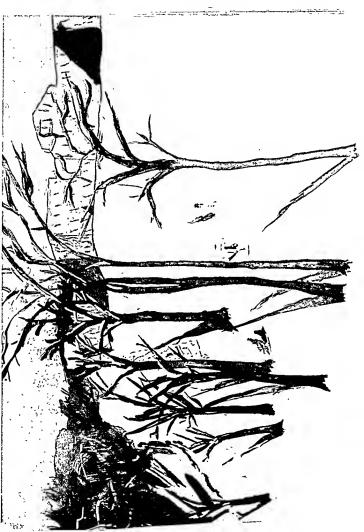
Fine examples of art work done by children, properly framed and hung, make appropriate permanent decorations for schoolrooms and halls. Original paintings by adult artists should also be used if they are obtainable. In the absence of genuine works of the painter's art, good reproductions of them are of course desirable. Reproductions of mural paintings often make excellent wall decorations. Pictures should emphasize, rather than obscure, the surface of the wall space they occupy. They should be framed simply and appropriately and

should, preferably, be fastened flat against the wall without appearing to be hung or suspended from anything. They should be placed low enough to be seen to advantage. Natural wood molding with rubbed varnish finish is generally to be preferred to gold or silver in framing. If a picture is selected to hang in a vertical wall space, it should be a vertical picture; if chosen for a horizontal wall space, it should be horizontal. The proportions of a picture should approximate the proportions of the wall space for which it is chosen. Large pictures are best for large rooms with large wall spaces; small pictures, for small rooms.

Since most schoolrooms are decidedly lacking in color, it follows that colored pictures should be preferred for the purpose of permanent decoration. In order that the pictures may be seen to the best advantage, they should present sufficient contrast in dark and light values.

Various rooms in the school building will call for different subjects for their decoration. Children are interested in most of the subjects that interest adults. It is not necessary to decorate a child's room with pictures of dogs, cats, or other pets. Pictures should have subject matter of the right sort, of course. They should supply desirable experiences that may be lacking in the everyday life of boys and girls. Landscape pictures and portraits of people of other lands and times are just as appropriate as are pictures that have but local significance. Pictures with a broader meaning often will be found to have educational value in developing cosmopolitan interests and

FINE EXAMPLES OF ART WORK DONE BY CHILDREN MAKE APPROPHIATE DECORATIONS FOR SCHOOLROOMS AND HALLS, Winter Londraps, Opeque Water Color Painting by Gilbert Wauph, Ninth Grade, William S. Barr School, Ballimore, Maryland.



attitudes. Yet no picture is sufficient unto itself. Those who look at it must be taught how to interpret its meaning and how to enjoy its beauty. It must be remembered that the decorative factor should be given precedence over subject-matter content in all the pictures that are to be on constant display.

The two volumes entitled Catalogue of Selected Color Reproductions, 1 publication of which was subsidized by the Carnegie Corporation of New York, contain information that is directly useful in the selection of color prints. These books contain hundreds of monotone reproductions of paintings, all of which are representative of the best work of artists, past and present, throughout the world. Many of the reproductions that the book enables one to identify are especially suitable for school decoration. The following facts are given for each picture which is procurable in full color: name of artist, nationality of artist, date, subject of painting, date of the original, medium used by the artist, size, location of work, print publishers, process of reproductions, size, American sales price. Large colored reproductions of most of the subjects catalogued can be procured through any art dealer.

The pictures listed below are suggested as particularly good and might be considered first in purchasing. They are designated because of their appropriateness of theme, size, and general suitability for school decoration.

COLOR PRINTS FOR SCHOOL DECORATION

Brueghel, Pieter, the Elder. Flemish C. 1525–1569 Autumn. Collotype. 2134×934

Catalogue of Selected Color Reproductions, Raymond and Raymond, Inc., New York, Vol. I, 1935; 2 vols.

The Haymakers. Collotype. Corot, Jean-Baptiste, Camille. $21\frac{1}{2} \times 29\frac{1}{2}$

Summer, The Harvest, Collotype, $21\% \times 30$

Winter. Colletype. 21% X 30%

Cappelle, Jan Van De. Dutch 1624-5-1679

A Calm at Sea. Collotype. $18\frac{1}{4} \times 18\frac{1}{4}$

Cézanne, Paul French, 1839-1906.

The House on the Hill in Provence, Collotype, 2434 × 31

Landscape, Mont Sainte-Victoire. Collotype. $25\% \times 32\%$

The Poplars. Colletype. 231/4 X 293/

Village Behind Trees. Collotype, 20% X 28%

The Village Street. Collotype. 2234×28

Corinth, Lovis. German. 1858-1925. Walchensee Landscape. Collo-

type. 2734 × 34

French, 1796-1875.

Castle Gandolfo. Combination $20\% \times 26\%$

The Pont of Ville d'Avray, Collotype, 20×27

The Wagon on the Dunes. Collotype, 191/2 × 253/2

Courbet, Gustave, French, 1819-1877.

Woods of Fontainebleau, Collotype, 24 × 32

Croll, Carl Robert, German 1800-1863.

Landscape. Collotype. 2034 X 3034

Davies, Arthur B. American. 1862-1928.

Italian Landscape, The Apennines. Collotype, 27×43

Degas, Hilaire Germain Edgar. French, 1834-1917.

The Ballet. Collotype. 23% X 1734

Derain, André, French, 1880-The Great Pinc. Colletype. 2414 × 2814

- Landscape, the Blue Oak. Collotype, 23½ × 30
- Farstauer, Anton. German. 1888-1930.
 - Gordone Sopra. Collotype. 23 × 2934
 - Friedrich, Caspar David, German. 1774-1840.
 - The Single Tree. Collotype. 22 × 2814
 - Summer Landscape. Colletype. 21 × 35
 - Gauguin, Paul. French. 1848-1903.
 - Tabitian Mountains. Collotype. 2614 × 36
 - Hassam, Childe. American, 1859-1935.
 - Golden Miernoon, Oregon, Collotype. 30 × 40
 - Homer, Winslow. American. 1836-1910.
 - Northeaster, Collotype, 25% X 3744
 - Hoppner, John. English, 1758-1810.

- The Sackville Children. Collotype. 241/8 × 195/8
- Inness, George. American. 1825-1804.
 - Peace and Plenty. Collotype. 3034 × 4434
- Kent, Rockwell. American. 1882– Mt. Equinox, Winter. Offset. 2034 × 2614
 - Winter, A View of Monhegan, Maine. Collotype. 271/8 × 36
- Kokoschka, Oskar, Austrian.
 - Terrace in Richmond. Collotype, 24% × 36%
- Lancret, Nicolas. French. 1690-1743.
 - Camargo Dancing. Collotype. 18½ × 26
- Lawrence, Sir Thomas. English. 1769-1830.
 - The Calmady Children. Collotype. 301/4 × 301/4
- Liebermann, Max. German, 1847-1935.
 - Garden at Wannsee. Colletype. 241/4 × 321/4

Macke, August. German. 1887- Monet, Claude Oscar, French. 1914.

Under the Trees. Collotype. $14\frac{1}{2} \times 20$

Manet, Edouard, French, 1839-1883.

The Fifer Boy. Collotype, 3214 X 261/4

Marc, Franz, German, 1880-1916

Deer in the Wood. Collotype. 21 × 811/2

Marquet, Albert. French. 1872-Ile de France, Collotype, 20% \times 26

Masereel, Frans. Belgian. 1889-Houses on the Dunes. Collotype, 26% × 33%

Massys, Cornelis. Flemish. 1512-(after 1580)

The Arrival at Bethlehem. Collotype, 21 1/8 × 29 1/2

Metcalf, Willard Leroy. American, 1858-1925.

Northcountry. Colletype. 3036 X 341/4

1840-1926.

Bridge of Argenteuil. Collotype, 2016 × 28

Cap d'Antibes. Collotype. 25 X 351%

Corniche Road near Monaco Collotype, 2816×36

The Doges' Palace, Collotype, 26 X 301/4

Fishers on the Seine, Collotype. 23 X 32

Near Argenteuil. Collotype. 1936×27

The Regatta at Argenteuil. Collotype, 1834 × 2834

Sailboat at Argenteuil. Collotype. 161/2 X 22

The Seine near Argenteuil. Collotype, 2114 × 2834

Summer, Collotype, 281/4 X 3516

Munch, Edward, Norwegian, 1863-

The Farm Yard. Collotype. 2534 × 331/4

Peclistein, Max Herrman. German, 1881-

- Morning on Lake Garda. Collotype. 27 × 34
- Peiner, Werner, German, 1897-Early morning. Collotype. 1914 × 2736
- Pissarro, Camille, French. 1830-1903.
 - Red Roofs, Collotype, 2012 X 2434
 - Radl, Anton, German, 1774-1852. Landscape near Taumus, Collotype, 2314 X 3514
- Rembrandt Harmenszoon Van Rijn. Dutch. 1606-1669. The Student. Collotype. 3134 \times 36
 - Renoir, Pierre Auguste. French. 1841-1919.
 - Portrait of a Young Girl. Collotype. 2434 × 2014
 - Two Girls at the Piano. Collotype. 1014 × 1434
 - The Beach at Pornic. Collotype. 2314 × 2916

- Woman and Child in a Field. Collotype. 2314 × 2814
- Reynolds, Sir Joshua. English. 1723-1792.
 - Georgiana Augusta Frederica Elliot. Collotype. 30 × 25
- Romney, George. English. 1734-1802.
 - Lady Hamilton as a Bacchante.
 - Colletype, 2514 X 20 Little Bopeep. Collotype. 1934 X 1514
- Ruisdael, Jacoh van. Dutch. 1628-29-1682.
 - The Chase. Colletype. 28 X 3434
 - The Great Forest. Collotype. $21\frac{1}{4} \times 27\frac{3}{4}$
 - The Shore of Scheveningen. Collotype. 1814 × 2278
- Schrimpf, Georg. German. 1889-Osterseen. Collotype. 221/4 X 35
 - Staffelsee. Colletype. 18×26
- Chestnut Tree in Bloom. Collo- Seurat, Georges. French. 1859-1891.

- Dimanche à la Grande Jatte. Collotype. 24 × 35½
- Sisley, Alfred. English. 1839-1889.
 - The Loing. Collotype. 2034 × 2514
- Sloan, John. American. 1871-The Wake of the Ferry Boat. Collotype. 1814 × 2214
- Spencer, Gilbert. English. 1892-The Home Farm, North Dean. Collotype. 16½ × 20¾
- Stuart, Gilbert. American. 1755-1828.
 - George Washington. Offset. 28 × 22
 - George Washington. Collotype. 29¼ × 24¼
- Ter Borch, Gerald. Dutch. 1617-1681.
 - The Concert. Collotype. 21% × 17½
- Thoma, Hans. German. 1839-1924.
 - Early Morning in June. Collotype. 27 × 3434

- Panoramic Landscape. Collotype. 23½ × 34½
- The Wandering Brook. Collotype. 27½ × 22
- Utrillo, Maurice. French. 1883-1934.
 - Church of St. Mamert. Collotype. 23½ × 32
- Valckenborgh, Lucas Van. Flemish. 1540-1625.
 - Harvest Time. Collotype. 27½ × 47½
- Van Gogh, Vincent. Dutch. 1853-1890.
 - Boats of Saintes-Maries. Collotype. 251/4 × 32
 - Landscape with Bridge. Collotype. 23 × 241/2
 - The Poppyfield. Collotype. 2414 × 31
 - Vegetable Gardens. Collotype. 2414 × 351%
 - View of Arles. Collotype. 2134 × 2734
- View of Arles with Iris. Collotype. 2034 × 2434
- Boats of Saintes-Maries. Collotype. 15 × 2034

Vlaminck, Maurice de. French. Wilson, Riehard. English. 1714-1876-1782.

The Street. Collotype. 251/4 X A Landscape. Collotype. 141/4 3116 $\times 25$

PRESENTING THE ART EDUCATION PROGRAM

The art teacher, supervisor, or director is often called on to present the work of the school or department before groups of parents and teachers. This is probably to be accomplished most effectively through the use of exhibits of ehildren's work and of still or motion pictures, or all three. The scenario that follows was used in connection with the presentation of the Division of Art Education at a regional meeting of parents in a large school system. The same organization of scenes could be followed if still pictures in the form of lantern slides were to be used. The title of the accompanying scenario is "The Story

MOTION PICTURE

Oral Introduction.2 3 min.

Baltimore was one of the first of our American cities, and first among the cities of the South, to establish and carry on courses in art in its public schools, for it was here that William Minifie had introduced instruction in drawing and design into a high school department as early as 1845. As the result of an ever-growing popular demand, by 1872 drawing and design had earned a place as a subject of study in the elementary schools also, and with the founding of the Manual Training School in 1884, Baltimore became the first American city

¹ Thus film was prepared in connection with a series in other educational fields under the direction d John L. Stenquist, Director of the Division of Statistics and Research. If would film is used, no announcements will have to be made orally.

The subject called art was given a place in the newly established junior high schools in 1919, and by 1924 the work in drawing, design, and crafts in the elementary, junior, and senior high schools had become so closely interrelated as to form a unified program. The elementary school art course of today furnishes an outlet for the creative activities of children, and in doing this it introduces them to the art field. The junior high school course relates to painting, sculpture, architecture, industrial art, and commercial art, special attention being given at this stage to the talented pupil, who is carefully watched and encouraged to go on with his art training in the senior high school. Today all senior high school boys and girls have the opportunity of taking a general course in design, which aims to acquaint them with the place that art occupies in the industries and in the home. For those pupils who wish to pursue the study of art in the senior high school, two courses are offered beyond the tenth grade. The studies that may be elected by these pupils according to their needs include art appreciation, costume design and illustration. advertising design, and architecture. Few of our boys and girls will become artists, but all can be taught to use the principles of design in their daily lives.

Title. 34 min. The Story of Art in the Schools (Book is shown, Cover opens gradually to title page and then to page 1 of text.)

The next time your child brings home a piece of "art work" done in school, pause a moment to consider that the study of this subject means to him the enrichment of his school life, the opening of his eyes to beauty, and of his mind to design or order, the eternal fitness of things in his environment.

Scene. 1 min. Kindergarten¹

Expression with materials begins in the kindergarten. Here drawing and painting are the natural means of self-expression. "Children delight in being the cause." Each child has his own story to tell and he is encouraged to tell it in his own way

Title. ½ min. Because some experience with art is involved in every field of schoolwork, art helps the pupil to learn more effectively. Its pursuit is, therefore, essential to bis liberal education on intellectual as well as on spiritual grounds.

Scene, 1 min. Primary Grades

The pupil's interest in ideas is stimulated and the meaning of words is made clear through drawing and construction work. The child draws a church and the teacher writes or letters the word CHURCH above his drawing.

Title. ½ min. In the elementary school art furnishes an outlet for the creative impulse, and is thus at the disposal of all subjects in the curriculum. It thus helps to bring all of the school subjects closer together. (Illustration, Frontispiece.)

Scene. 1/4 min. Intermediate Grades

Children are seen entering the classroom. They are about to begin work on a unit of teaching dealing with one of the outlying possessions of the United States (Hawaii).

Scree captions as well as all titles appear on acreen. Supplementary comments under scree captions are presented orally unless would film is provided.

Scene. 34 min. Reading

As he reads about the people of other lands, the pupil's interests are broadened while his school experiences gradually grow until they come to embrace the entire world.

Scene. 1 min. Geography

In geography he becomes acquainted with the peoples of the earth and he comes to realize how all nations are dependent on one another.

Scene. 2 min. Art

These experiences are so vital to the pupil that they demand some form of concrete expression. Boys and girls are participating in the life of the American Indians. (Illustration, page 7.)

Title. ½ min. The elementary school course of study in art has been developed on the assumption that a motive for the instruction offered should be found in the creative activities of children, and that the chief objective to be accomplished through teaching should be the enjoyment and appreciation of works of art.

Scene. 1/2 min. Art Appreciation

The pupil becomes interested in the creative work of the artists of various countries who have succeeded in expressing most adequately the thoughts and ideals of their contemporaries.

Title. ½ min. The junior high school subject of art is coordinate with the other school subjects. Here the course concerns itself with

materials, processes, and products, and with aesthetic values, thus leading to intelligent discrimination in the choice of clothing and things for the home; while buildings, statues, pictures, and common things of daily use take on a new meaning, once their artistic significance is understood.

Scene. 1 min. Industrial Art

A full appreciation of the common things of daily life requires some knowledge regarding how such things are conceived, designed, and put out for the market. (Illustration, page 273.)

Scene. 1/2 min. Jewelry

This knowledge is best gained through experience in handling the materials constructively.

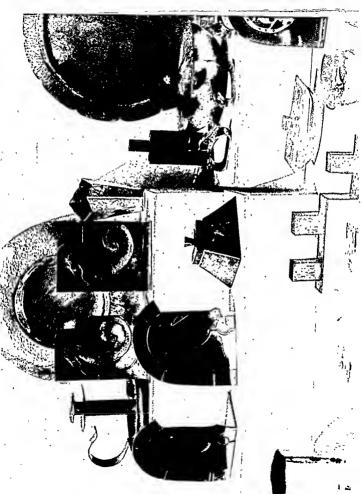
Scene. 34 min. Club Activities

Valuable experience in manipulating materials is also gained through activities which supplement the work of the classroom. (Illustration, page 145.)

Scene. 34 min. Sculpture

The activities of the sculptor are experienced through modeling creatively, through carving, and through casting in plaster of Paris-(Illustration, page 71.)

ART CANNOT BE APPLIED; IT IS INHERENT IN THE VERY CONSTRUCTION OF AN OBJECT. Craft Products, Work in Copper and Brass, by a Junior High School Class, Providence, Rhode Island. Public School.



Scene. 1/2 min. Boy Working on Sculpture at Home

Such experience often carries over into the home life of the pupils.

Scene. 1 min. Architecture

A knowledge of architecture hegins at home and carries over into the immediate neighborhood, and ultimately to the architectual masterpieces of the world. (Illustration, page 179.)

Scene. 34 min. Commercial Art

The student is also acquainted with the part that art plays in business and in the propagation of desirable ideas: health, safety, and

Scene. 1 min. Painting

Through the use of the mediums of the painter, students are helped to understand and appreciate paintings. (Illustration, page

Scene. 1 min. Work in Library

Books and prints in the school library furnish a hackground for the creative work in painting and in the other arts. (Illustration,

Scene. 34 min. "The Royal Art Studio"

The art instruction received in school inspired these hoys to set up their own studio in the home of one of the memhers of the class.

Title. 1/2 min. In the senior high schools the general course in design, offered in the tenth grade, aims to establish standards of taste and

skill which will be valuable to all pupils, regardless of the curriculum which they will later follow. In the eleventh and twelfth grades art is offered as a major subject, the purpose of which is to provide a foundation for further specialization in the art school or college or in industry or business. The art-major courses are elective.

Scene. 1 min. Design

Since planning, which is another name for design, precedes all specialized work in art, it is made the basis of instruction in all of the art courses. The study of design includes an application of the principles of order to the practical problems of daily life. The object of design is the realization of harmony, which is to be striven for in all of the problems undertaken. (Illustration, page 61.)

Scene. 1 min. Costume

Costume design and illustration are important art occupations. The girl who masters the costume course is able to design her own clothing and to make a wiser selection of costume fabrics. She is also prepared to go on with specialized training.

Scene. 1 min. Advertising

Many of our most successful artists of the present day began their careers as commercial designers. The commercial art course furnishes a sound foundation for most types of work in the art field.

Title. ½ min. Throughout the school system, art helps boys and girls to learn more effectively, it helps them to find themselves both educationally and vocationally, and it helps them to employ their leisure more advantageously. It also enables the school to find out what

special talent pupils possess, in order to guide them wisely into suitable vocations or the profitable use of leisure time. (Illustration, page 295.)

Scene. 34 min. Visiting Artist's Studio

Groups of students accompanied by their art teachers are occasionally given a glimpse of the artist at work. In this way they are acquainted with some of the technical problems that artists have to solve. These visits also belp students to appreciate the skill and taste that go into the production of works of art.

Scene, 1 min. Class Visiting the Baltimore Museum of Art

Classes are taken to visit the art museums of the city, where they are familiarized with outstanding works of art. They come to acquire the habit of visiting the museum for purposes of learning and

Scene. 1 min. Pupils Visiting the Walters Art Gallery

Boys and girls are also encouraged to visit the art museums after school hours and on holidays. Attendance cards given to them at the museums are filed by the art teachers, who are thus able to keep

Title. 14 min. The End (Book closes gradually, revealing again the

Oral Conclusion. 2 min.

The influence of the art training received by pupils in the public schools is becoming noticeable in the improved taste that is in evi-

dence all about us. The time has indeed arrived when merchandise offered for sale must not only be good from the standpoint of material, it must also be good looking. Their knowledge of art acquired in school helps boys and girls to select, purchase, and use economically various kinds of commodities for themselves and for the home. And just as the production of art implies creation, so does an appreciation of it imply recreation, for the study of art in the schools leads directly to the profitable employment of leisure and to the enrichment of life.

TELEVISION

Still another effective way of acquainting the public with the art education program is afforded by television broadcasts. This newer medium has a decided advantage over all the others, of showing the activities of teacher and pupils as they actually take place in time and space in the school classroom, studio, or museum. Art processes as well as art products and even discussions may now be presented before an ever-increasing and understanding, unseen audience, once the facilities for doing this are made available. More perhaps than any other curriculum area, art should take advantage of this medium for the communication of ideas, feelings and visual forms.

QUESTIONS FOR DISCUSSION

- Of what use are public museums to the schools? To what extent are they educational agents in the community?
- 2. What is meant by the term school museum? What facilities are essential to the establishment of a school museum?
- 3. With what topics should the exhibits shown in a school museum deal?
- 4. Why should the activities of a school museum conform to a schedule prepared in advance?

- 5. Why are school museums desirable?
- 6. How should the exhibits be labeled? Arranged?
- 7. What part do bulletin boards play in the maintenance of a school museum?
- 8. Why should pictures put on permanent display in a school be considered as coming within the range of the school museum?
- 9. What kinds of pictures are best for permanent display in a school building?
- 10. How can the art department of a school system best be presented to the public?

REFERENCES

GENERAL BOOKS

- Coleman, L. V., The Museum in America, 3 vols., American Association of Museums, Washington D.C., 1939.
- low, T. L., The Educational Philosophy and Practice of Art Museums, Bureau of Publications, Teachers College, Columbia University, New York, 1048.
- Mengel, L. W., A Brief Sketch of the Reading Public Museum and Art Gallery, 13 pp., The Department of Visual Education, Reading, Pa., 1937.

Powel, Lydia, The Art Museum Comes to the School, p. 157, Harper & Brothers,

Richards, C. E., Industrial Art and the Museum, pp. 51-70, The Macmillan Com-

VanPelt, J. V., Study of Educational Work Proposed for the Museum of the City of

BOOKLETS

Thurston, Carl, ed., Enjoy Your Museum (series), Esto Publishing Company,

The following booklets may be procured from most art museums, or from the publishers. Single copies are 15 cents.

Painting, by Carl Thurston

Watercolors, by Royal B. Farnum Etchiog, by Artbur Muillier Painting Since Cézanne, by Ralph M. How I Make a Woodcut, by Rockwell Pearson Kent

Prints, by Roy Vernon Sowers and Pottery and Porcelain, by George H. Pauline Sowers Opdyle

Hopi Pottery, by Frederic H. Douglas

Indian Pottery of the Rio Grande, by Mary Austin

Old Sandwich Glass, hy William Germain Dooley

Navajo Rugs, hy Dane and Mary Roberts Coolidge

Sculpture, hy Carl Thurston

Modern Mural Sculpture, hy Lee Lawrie

Italian Maiolica, by Victor Merlo

Vincent Van Gogh, hy Paul Rosenfeld Remhrandt's Paintings, hy Frank Jewett Mather. Jr.

Photography, hy Edward Weston

Beauty in Books, by Robert O. Schad Albrecht Durer, by Arthur Millier

Chinese Art. by Karl With

What to Do in a Museum, by Carl

Illuminated Manuscripts, hy R. B. Haselden

Greek Vases, hy Victor Merlo

Handwoven Textiles, by Phyllis Acker-

Apache Baskets, hy Frederic H. Douglas Casts of Great Sculpture, hy Lorado

American Furniture of the 18th Century, hy Walter A. Dyer

At the Heart of Architecture, by E. B. Goodell, Jr.

What Is Art For? hy Carl Thurston Use Your Museum at Home, by I. T. Frank

Italian Primitives, hy Stephan Bourgeois

The Art of the Madonna, hy Carl Thurston

Gainsborough and Reynolds, hy C. H. Collins Baker Mural Painting, by Charles Kassler, II

Lithographs, hy C. E. Seward Japanese Prints, hy Louis V. Ledoux Early American Silver, hy Millicent D. Stow

Architecture, by Carl Thurston
If You Are a Child, by Ruth Whitney
Knapp and Elizabeth Jane Merrill
On Making Friends with Art, by Hart-

ley B. Alexander
Tapestries, by Phillis Ackerman

Tapestries, by Phillis Ackerman Design Today, by Walter Baermann

The Discovery and Evaluation of Art Abilities

LTHOUGH little is known about what constitutes talent in the various forms of visual art, it is probably true that most, if not all, art teachers think they are able to recognize talent in some of their pupils. Yet, when these pupils are subjected to any of the art tests at present on the market, the results of such tests are generally disappointing.

What qualities of inclination or of aptitude does the artistically superior child possess that entitle him to be considered as talented; what character qualities? Is the intelligence quotient an index to talent in visual art? Is the school average an index? What, if anything, do social and economic conditions have to do with superiority in

With these and other similar questions in mind, the author made a systematic effort as herein described, to discover and evaluate the factors related to ability in visual art, especially as revealed by drawings made by the ninth-grade pupils of a large school system.

The pioneer effort to measure a person's ability in drawing was made by Thorndike¹ in 1913, when he constructed a scale

^{&#}x27;Thorndake, Edward L., "The Measurement of Achievement in Drawing," Teachers College Record, Columbia University, November, 1915,

which attempted to measure the child's achievement. To do this an objective scale for drawing, the use of which is reasonably free from subjective judgment factors, was constructed. Rankings of 45 drawings by 376 competent judges were secured; and a scale was formed from 14 selected specimens, ranging by more or less unequal units from 0 to 17 in merit. Later, this original scale was extended and revised by securing the ratings of 4,000 drawings by 5 to 15 judgments, together with the ratings of 903 selected drawings by 75 to 100 judgments. The revised scale was formed from 70 specimens, ranging from 0 to 17 in merit.

In 1922, Kline and Carey¹ devised a more elaborate scale, which they revised in 1923. The object of the studies carried on by Kline and Carey was also to construct a scale which would measure drawing achievement. Sample drawings were collected under standard conditions upon four themes—house, rabbit, figure in action, tree—from the kindergarten and 12 grades of the public school. All samples were drawn by the pupils from memory. The first edition was scaled by 92 judges, and the steps between the samples in the scale were determined by the statistical methods generally applied to educational problems. The revised edition, No. 5a, was scaled by 152 judges, the same themes being used as in the original edition. The judges were teachers of art and supervisors of art education, as well as professional artists. The larger number of judges gives stability to the position assigned to the samples in the scale and a higher degree of reliability.

Directions for using the scale which was developed as Part I are given to both pupils and teachers.

¹ Kline, Linus W., and Gertrude L. Carey. A Measuring Scale for Free-hand Drawing. The Johns Hopkins Press, Baltimore, 1983.

Part II of the Kline-Carey Scale is a scale in design and composition, based upon some 40,000 drawings collected under standard conditions from nearly all parts of the United States and scaled by 54 judges, the greater number of whom were supervisors of art. The themes comprise illustrations, designs, posters, and borders.

AN INVESTIGATION OF TALENT IN ART

The study described in the pages that follow is illustrative of the scientific approach to the problem of discovering and evaluating art abilities. It is boped that the study will lead to further experimentation and investigation with an assigned theme and with the questions involving the economic and social status of the pupils investigated.

"I would say in general," suggests Munro,2 "that any formal test of children's creative ability in art should be of the 'worksample' type. It must not call merely for preference, true-false answers or even completion of incomplete forms. It must give the child a cliance to construct a complete, independent form of bis own, since his power to do this is precisely what we are interested in. Our problem, then, is first of all to make this work-sample test as revealing as possible; to make it bring out the child's best abilities. It is not enough to say 'draw something,' for that is apt either to confuse and paralyze him, or to bring out some stereotyped copy of a newspaper cartoon. Nor is it enough to say, 'copy this drawing,' or 'copy this object from nature,' for these would not test his imagination. I doubt if any one task, any one art product, will serve to bring out enough

Association, Vol. 17, No. 6, Dec. 1, 1933.

¹ From "A Comparative Study of Twenty 9.1 Pupils Ranking Highest and Twenty Ranking Low in an Assigned Problem in Visual Art," an unpublished master's thesis by the author, submitted Manro, Thomas, "Art Tests and Research in Art Education," Proceedings of the Western Arts

different abilities. We should call for several different tasks, each designed to involve one or more of the abilities which we consider essential to good drawing. The tasks should be fairly but not too specific, so as to stimulate a definite quick response and yet leave room for individual variation. They should require no highly specialized training or experience, in which some children might be at an unfair advantage. They should not be too easy or too hard to complete in the time allowed, by children of the age-level to be tested. If we hope to study the results scientifically, the test must be somewhat standardized throughout, so as to eliminate irrelevant causes of success or failure. I mean for example that all children taking the same test should be given similar materials and conditions for work; that the same time should be allowed to all for a given task; that instructions for the task should be similarly worded for all, so that none will have more instructions to work with. Much standardization would be harmful at the present stage; this is no time for publishing broadcast any exact formulation of a test, as American educators are prone to do."

THE PRELIMINARY STUDY

SETTING THE PROBLEM IN DRAWING AND DESIGN

After considering carefully the various kinds of art tests available, it became apparent that no one of them in itself would be sufficient to prognosticate general art ability in pupils, since each test was devised to ascertain either the subject's judgment or his appreciation of art products, or his ability in representation and design. Although the Kline-Carey Measuring Scale for Free-hand Drawing, Part I, on Representation, and Part II on Design and Composition, in its

¹ Kline, L. W., and G. L. Carey, A Heasuring Scale for Free-hand Drawing, Part I, "Representation," 1922, rev. 1933; Part II, "Design and Composition," Johns Hopkins Press, Baltimore, 1833.

revised form, does not allow for much ereative originality on the subject's part, it does, nevertheless, include representation, design, and composition. The scale, being composed of the two parts referred to and each part itself being divided into a number of lesser parts, was not, however, deemed impractical for use.

It was decided, after an investigation in which the opinion of a number of junior and senior high school art teachers was obtained, to use the themes employed in Part I (representation) of the Kline-Carey Scale, not individually as Kline and Carey used them, but collectively, in the making of a single composition which, it was decided, should he drawn or painted in color. Instead of employing the four individual themes that Kline and Carey used (a boy running, a house, a tree, a rabbit), it was decided to use an all-embracing theme for the new problem, which would retain the representational advantages of Part I of the Kline-Carey Scale and would at the same time prove less complicated and otherwise better suited to the special requirements of the problem. The theme formulated was as follows: "Near the house was a tree. The boy was running toward the house when a

In following this plan, most of the advantages to be secured through using Part II of the Kline-Carey Scale, as well as all the advantages to be secured through the use of Part I, could thus be attained. By restating the problem as described and by specifying that the drawing should be done in color, elements of design and composition as well as of representation would be involved, and the necessity of giving an additional problem in design and composition

In the new problem, design was not to be considered apart from representation, and a greater opportunity was afforded for creativeness on the part of the child. By requiring that the pupil do some lettering on the back of his drawing, this item, included in Part II of the Kline-Carey Scale, was also incorporated in the problem. With these conditions in mind, the new problem assignment was formulated and mimeographed, and "assignment notices" were prepared for the children to be examined.

FORMING A SCORE CARD FOR RANKING THE WORK

The need for a score sheet to assist in grading the drawings was at once evident. In the preparation of this score sheet, the requirements of the problem as set forth in the assignment, as well as those imposed by the Kline-Carey Scale, were all carefully incorporated. Each drawing was given four percentage ratings, one in representation, one in composition, one in design, and one in lettering, these ratings being averaged for the final score. In order to secure the score for representation, five ratings (four on shapes and one on perspective) were averaged; for composition, three ratings (one each on line, mass, and color); for design, two ratings (one on rhythm and one on balance). The score sheet was arranged in the form of a mask, with openings cut out for the scores, stencillike. Thus, it was possible to use the same score sheet for all the grading. The ratings were recorded on the back of the record eard of each pupil.

The grading was done by experienced art teachers who had, spread out before them as they worked, complete copies of the Klinc-Carey Measuring Scales for Representation, and for Design and Composition. These scales proved of great value to the examiners in estimating the grade to be given for each particular item appearing on the score sheet. Incidentally, some very interesting further observations were made which evidently did not come within the

realm of measurement included in the score sheet. For example, there were the drawings made by a prospective aviator, in which the scene is represented as viewed from the air. There was also the bouse, drawn by a high-ranking girl, which smiles at the boy chasing the rabbit. There is the drawing of a rabbit that has paused to eat a carrot, and of a hoy dressed in sports costume, drawn by a promising young athlete. These and numerous similar examples prompted the investigators to wonder whether the story-telling phase of the picture-making problem might not also he entitled to some share in the evaluation, a point which subsequently received an increasing amount of attention in the development of the study.

EVALUATING THE PROCEDURE

The preliminary investigation was confined to pupils who were reported by their art teachers as takented. The problem set for the pupil embraced the making of a drawing in color to illustrate a theme previously formulated by the investigators. A score card was devised and the drawings scored by means of this device. Although the use of such a score card for rating from one composite drawing the ability of the pupil in hotb composition and design may be regarded as fairly satisfactory (the method of combining nine ratings, the proper weight to he assigned to each of them heing unknown) the device cannot he regarded as sufficiently accurate. Besides, the method employed did not take into consideration the range of content employed by the individual pupil in his composition. A better technique for evaluating the drawings should, therefore, be found. The study should include not only the supposedly talented pupils but all the pupils enrolled in the school system at a specified grade level.

THE MAJOR STUDY

DEFINING THE FIELD

The specific purpose of the major study was to discover and evaluate factors related to ability in visual art, especially as revealed by drawings made by ninth-grade pupils, specifically a comparative study of 20 9A pupils ranking highest and 20 ranking low in an assigned problem. As the study developed, a middle group also was formed. This group was made up of children of intelligence equal to that of those who made the highest ranking drawings, but who made poor, though not the poorest, drawings.

SETTING THE PROBLEM AND ASSIGNING IT

It was deemed advisable at the onset to simplify the pupil assignment by stating it in the form of a single simple sentence, thus: "The boy was running toward the house by the tree when a rabbit appeared."

The notice which was sent to the principals of schools included the following stipulations:

"We are designating the week of April 22 for the giving of a test in drawing and painting in the 9A grades. All 9A pupils are to be given this test.

"The procedure to be followed by the art teachers in giving the test is as follows:

"Instructions to Teachers

"1. Before the pupils enter the classroom, write the assignment on the blackboard where the statements can be seen clearly by all members of the class. Heading is 'Assignment of the Problem.' This should be written above the statements as indicated:

"Assignment of the Problem

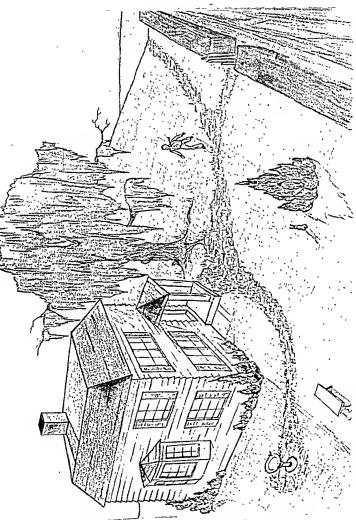
- "a. Letter carefully on the back of a piece of white or Manila paper or cardboard, exactly nine inches by twelve inches,
 - (1) your name in full, (2) your age on your last birthday,
 - (3) the name or number of your school, (4) the grade in which you are working, and (5) the date.
- "b. On the front side of the paper make a drawing or painting in color to show (1) a boy running, (2) a house, (3) a tree, and (4) a rabbit, to illustrate the following: The boy was running toward the house by the tree when a rabbit appeared.

This work is to be done in school, in the presence of the teacher who assigns the problem, and without receiving help from anyone.

"2. Cover the assignment so it cannot be seen by the pupils.

- "3. Explain briefly that an assignment in the form of written directions is about to be given the class.
 - "4. Expose the assignment by uncovering it.
- "5. Explain where paper and other needed materials are to be found.
 - "6. See that all pupils are furnished with the materials necessary.

THERE WAS THE DRAWING MADE BY A PROSPECTIVE AVIATOR, IN WHICH THE SCENE IS REPRESENTED AS VIEWED FROM THE AIR, Mustration of Assigned Theme, Executed in Percal and Mardpeteral Celeral Crayons, by a Junior High School Boy, Editor, Maryland, Public Schools.



"7. When ten minutes have elapsed inform pupils that the time allowed for lettering has ended.

"8. Allow entire double period (90 minutes) for completion of the assignment.

"We should like to receive the drawings at the office of the Director of Art Education, Room 252, 3 East 25th Street, not later than Saturday, May 4. The drawings may be sent to the Administration Building by the school janitor."

Drawings were subsequently turned in for 3,315 pupils of 9A grade.

EXAMINING AND SCORING THE DRAWINGS

An examination of the drawings made by the 3,315 pupils of 9A grade was subsequently carried forward under the direction of Walter H. Klar. From the entire collection of drawings, those that did not contain the four prescribed elements (boy, house, tree, rabbit) or were unfinished were rejected, leaving approximately 1,800 drawings to be examined further.

The object of Klar's study was to discover, if possible, whether there might be some general prevailing characteristic or tendency among the drawings. The first step toward a solution came when it was discovered that many of the drawings had evidently been composed through the simple and practical method of placing each one of the four required objects on a straight horizontal line. Out of 500 drawings selected at random there were 26 or 5.2 per cent composed in this simple and direct manner. This characteristic had also occurred frequently in the incompleted drawings.

^{*}Mar. Walter II., "Developing a Scoring Device for Rating Pupils' Pictorial Compositions," Eatherst Bullets of Education, Vol. 16, No. 2, June, 1936, pp. 42-46

A further examination of the drawings revealed the fact that many pupils had varied their arrangement from that of the straight line order to the use of a curve for the base line. When a number of such drawings were studied intensively the objects in them appeared as so many thoughts or ideas arranged in 1-2-3-4 order, sentencelike. While making these drawings, the children seem to have said to themselves, "I must draw a house, then a boy, then a rabbit, then a tree. The way to do this is first draw a line, and then put the required objects in order on the line." In not over one case in a hundred, however, were the results of the 1-2-3-4 order drawings such as could be termed artistic.

Of the 500 cases referred to, 417 or 83 per cent wholly or partially followed the straight line or the curved line order of composition. In these drawings there appeared no path. When the compositions were studied again to find out just how frequently the path in any form had been introduced, it was found to constitute a common element in a large proportion of the drawings. The inclusion of a path was seen to be a step in advance over the line-order pattern (although several splendid compositions contained none) because (1) its usc was an evidence of exceeding the prescribed requirements: (2) it could be employed either decoratively or illustratively: (3) it was evidence of the pupil's use of imagination. The path seems to have been included in the compositions because most houses require one, or because the boy would be running toward the house on onc. Thus, the path indicated a logical piece of thinking. The number of drawings with a path, as compared with the number of drawings without one but composed on the line-order pattern seemed, therefore, to constitute a distinct class of compositions, another step higher in a developmental scale.

It was further observed that where a path had been included the quality of drawing tended to be better also, and the entire composition to become correspondingly richer in subject-matter content. For example, there might be two paths, two or more houses, two trees or a row of trees, shrubbery, flower beds, a fence, distant trees, and one or more mountain tops. These and other objects not present in either of the first two classes of drawings were nll found to be used with ease in some of the more elaborate compositions. There also appeared to be a corresponding improvement in the color treatment. Incidentally, the path was found to be present also in each of the 15 highest rated drawings used in the preliminary study.

In fully 30 per cent of the drawings containing a path, the ground area had been made to appear as a vertical plane, with the horizon either a straight or a curved line, without any apparent attempt to suggest distance. As this was the largest of the three groups thus fur isolated, it was assumed that these drawings typified what might be called moderate ability, in contrast with the lower stage exemplified in the line-order compositions.

An examination of the ground area in several hundred drawings revealed that, due either to purposeful or accidental handling of the medium, the ground in many instances seemed to lie as a flat or inclined plane. Some drawings were found where the upper edge of the ground area had been softened, as though leading into the sky, while in others the lower part of the ground area had been strengthened, to indicate that it was nearer to the observer. There were still

ASSIGNED THEME: THE BOY WAS RUNNING TOWARD THE HOUSE BY THE TREE WHEN A RABBIT APPEARED. Illustration of Theme, Executed in Transparent Water Color, by a Senior High School Boy, Baltimore Public Schools.



other compositions in which was apparent an effort to represent distant objects as seen across a horizontal ground area.

The opinion was finally reached that, whether desirable or not as an element in composition, a working use of what is generally referred to as perspective affords the pupil a larger range of area in which to work, for the use of a third dimension, or distance into the picture, provides him with a space in which he can put any number of objects. In the drawings in which distance bad thus been developed, there again seemed to be an added quality of richness of ideas. Many of these drawings contained variation in the treatment of windows, roof, porch, steps, foundation, brickwork; details, such as drainpipes, gutters, door numbers, letter boxes, and occasionally an electric light or articles of garden furniture in the yard.

The drawings with a large number of ideas illustrated generally seemed to be of a correspondingly higher technical quality. Such drawings must obviously have been made by children who had acquired an extensive vocabulary of graphic forms. It was observed, moreover, that the drawings of considerable intellectual content were usually finished and that they must, therefore, have been drawn more rapidly.

Graduated Stages of Composition (See illustration on page 295)

The examination of drawings up to this point left little doubt that there did exist a progressive gradation in the individual's ability to compose pictures—one capable of being described according to fairly definite degrees, which were summarized as follows:

1. Casual Stage. The tree, house, boy, and rabbit are suggested with sufficient accuracy to be recognizable, but are not arranged in an orderly way within the given area.

- 2. Practical Stage. The tree, house, boy, and rabbit are suggested with sufficient accuracy to be recognizable, and the base of each figure is on a straight or curved line, often near or exactly on the lower margin of the composition. The series of objects resembles a pictorial sentence, usually without artistic significance.
- 3. Logical Two-dimensional Stage. The ground area through which a path extends is treated as though in profile. Typically, the ground line is ahout halfway up from the lower edge of the composition; the horizon line is straight, or nearly so. In its lowest form, the path is a straight line or lines; in its higher forms, it curves. The composition is treated more as if in two dimensions than as if in three. The product is often without artistic significance.
- 4. Logical Three-dimensional Stage. The path serves the purpose of uniting forms within the area as, for example, the boy and the rabbit with the house, and also of leading away and into the distance. Middle-distant and far-distant hills or mountains are introduced. There seems to be a cooscious plan to manipulate form in space. Distance is accounted for through a reduction in the size of objects and through a corresponding change in color. The product is logical and story telling, although it may be without much artistic significance.
 - 5. Facile Stage. The forms are manipulated at will. The relationship between objects in either two- or three-dimensional areas approaches the standards of the adult artist. If space is filled and path or distance

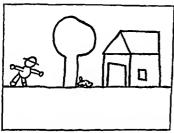
SCORING DEVICE SHOWING FIVE CHARACTERISTIC STAGES OF DEVELOPMENT.



 Casual Stage.—The tree, house, boy, and rabbit are suggested with sufficient accuracy to be recognizable but are not arranged in an orderly manner within the given area.



 Logical Two-dimensional Stage.—The ground through which a path extends is treated as though in.
 The composition is treated more as if in two dimensi than three.



2. Practical Stage.—The hase of each figure is on a straight line, usually near the lower margin of the composition. The series of objects resembles a pictorial sentence.



 Logical Three-dimensional Stage.—Middle-distant far-distant hills or mountains are introduced. Distance accounted for through a reduction in size of objects, through a corresponding change in color.



2. Practical Stage.—The base of each figure is on a curved line, usually near the lower margin of the composition. The series of objects resembles a pictorial sentence.



5. Facile Stage,—The relationship between objects approaches the standards of the adult artist. There is evidence of direct attempts to produce color harmonies and to exceed the specified requirements.

is used, there is evidence of purposeful planning, and the several forms hold their relative positions correctly. There is often evidence of a direct attempt to produce color harmonies; a marked tendency to exceed the specified requirements, apparent in the use of several trees, which are frequently of varying sizes and kinds, supplementary paths, details of lawn and foundation planting, and variety in the

The usefulness of a scoring device of this kind will be found in its helpfulness to teachers in evaluating and, therefore, appreciating more fully the creative efforts of children as revealed by their pictorial compositions. The analysis should apply to pictorial compositions in general, for, regardless of the theme chosen, in each will be found the same range of organization from simple to complex, from the vacillating, casual execution up through the succeeding practical and logical phases of development until facility of expression is finally reached. This device for scoring drawings was found to be superior to that used in rating the drawings made by talented pupils reported in the description of the preliminary study, because it considers the range of subject matter or the intellectual and spiritual content involved, as well as the technical or form side, which was taken into account exclusively in the earlier study.

SECURING THE DATA ON PUPILS

General data, art data, and economic and social data were first secured for the 20 pupils who turned in the drawings that ranked highest in the test. The general data were obtained from the school record cards and from the 9A art teachers; the art data, from the art teachers; the economic and social data, from the guidance counselors who interviewed each child individually and turned in written reports

THE DISCOVERY AND EVALUATION OF ART ABILITIES

The general data included the following items: (a) sex and intelligence quotients; (b) chronological ages; (c) mental ages; (d) health; (e) school average; (f) conduct; (g) appearance; (h) initiative; (i) reliability; (j) cooperation; (k) promptness; (l) perseverance; (m) hobbies; (n) subject preference; (o) occupational preference.

The art data included: (a) inventiveness; (b) skillfulness; (c) accurateness; (d) art average; (e) adapted Kline-Carey Score; (f) Klar Grouping Score.

The economic and social data included: (a) reared in country or city; (b) ugly or attractive environment; (c) outside jobs; (d) toys and playthings preferred as a child; (e) attitude of parents toward creative effort; (f) occupation of parents; (g) hobbies of parents; (h) schooling of parents; (i) brothers in and out of school; (j) sisters in and out of school; (k) private lessons in art; (l) art museum and exhibition attendance; (m) private lessons in music; (n) musical instruments played; (o) concert attendance; (p) picture-show attendance; (q) language spoken at home; (r) higher education contemplated; (s) contact with art objects; (t) advantages of travel; (u) the most beautiful things seen.

Similar information was secured for the second group, made up of 20 pupils of intelligence² (I.Q.) equal to those included in the first group, and for the third group, made up of 20 pupils who were ranked lowest in the assigned problem in visual art.

All of the items of general, art, and economic and social data relating to each pupil were now brought together on a single blank. This blank, with the drawing made by the pupil, and notes, cor-

¹ Classification is based on the Sims Socio-economic Score Card. Sims, V. M., The Measurement of Socio-economic Status, Public School Publishing Company, Bloomington, Ill., 1928.

³ From teachers' records of LQ, obtained by using the Otis Self-Administering Tests of Mental Ability, Otis, A. S., Otis Self-Administering Tests of Mental Ability, for Intermediate and Higher Erumination, World Book Company, Youtherson-Hudon, N. Y., 1983.

respondence, and other information relating to the pupil, were all placed together in a folder and filed under the name and case number of the individual.

SUMMARY OF FINDINGS

Some of the items of information—such as appearance, and attitude of parents—secured in connection with the investigation were eliminated from the final report after they were found to have no special bearing on the major problem. The findings embrace three classifications: Group I, which includes those children who were ranked highest in the drawing problem; Group II, which includes those who made poor drawings, although they were of intelligence (I.Q.) equal to the pupils in Group I; and Group III, which includes those who made the poorest drawings.

GENERAL DATA

Sex and Intelligence Quotients. Sixty 9A pupils were involved in the study, 39 girls and 21 boys. Forty of these pupils constitute the 20 ranking highest and 20 ranking low in the assigned problem in visual art. There was also a third group made up of 20 pupils who ranked lowest in the assigned problem. Each of the individuals in the high-ranking group was paired on the basis of I.Q. with an individual in the low ranking group. In each of the groups there were a few more girls than boys. With the exception of one girl in the third group, all the pupils included in the study were of normal intelligence or above.

The average I.Q. of the paired groups was 105.5, the median being 108. The average I.Q. of the third group was 103.5, the median being 105.

The artistically superior pupils ranked higher in I.Q. than did the artistically inferior pupils of Group III.

Chronological Ages. Of the two groups paired on the basis of I.Q., the individuals in Group I were found to be of slightly greater ehronological age than those of Group II. The individuals in Group III were found to be of slightly greater chronological age than those of Group II, but of lesser chronological age than those of Group I.

The average C.A. (chronological age) for Group I was fifteen years and five months; that for Group II, exactly fifteen years. The median C.A. for Group I was fifteen years and five months; for Group II, fourteen years and eleven months. The average C.A. for Group III was fifteen years and two months; the median C.A. for this group, fifteen years and four months.

The ehronologically oldest pupils were, therefore, found to be those who had produced the highest ranking drawings.

Mental Ages. The individuals in Group I were found to be of slightly greater mental age than those of Group II, who as a group were, however, nearly one year older mentally than the pupils in Group III, who were the youngest mentally of all.

The average M.A. (mental age) for Group I was exactly seventeen years; that for Group II, sixteen years and six months. The median M.A. for Group I was seventeen years and two months; for Group II, sixteen years and six months. The average M.A. for Group III was fifteen years and seven months; the median M.A. for this group, fifteen years and six months.

The pupils who were older mentally were, therefore, found to be those who had produced the highest ranking drawings.

ART DATA

Intentiteness. In the opinion of their art teachers 40 per cent of the artistically superior pupils were regarded as inventive, whereas hut 10 per cent of the equally intelligent, though less artistic, group were so reported, and none of the artistically inferior group.

Accurateness. Fifty-five per cent of the artistically superior pupils were reported by their art teachers as accurate, whereas hut 20 per cent of the equally intelligent group were so reported, and but 10 per cent of the lowest ranking group.

Art Arcrages. The highest school art averages were found to have been received by the artistically superior pupils, while the art averages received by the equally iotelligent, though less artistic, pupils were found to he considerably lower.

The lowest school art averages of all were found to have heen received by the artistically inferior pupils, but these averages were nearer to those received by the second group than to those received

This would indicate a high correlation between the school art averages and the scores received in the tests in visual art.

Kline-Carey Test Scores. Although it was easy, by means of the adapted Kline and Carey Measuring Scale, to select the drawings which should rank highest and lowest in the study, it was more difficult to find poor drawings made by pupils of intelligence equal to those

When all the drawings had been rated and the scores tabulated, the marked superiority of the artistically superior group over the group of pupils of equal intelligence was at once apparent. It was surprising, however, to see how closely the scores of the latter group compared with those of the pupils who made the poorest drawings.

This would seem to indicate that individuals of approximately the same general intelligence are capable of making drawings of varying degrees of artistic excellence, the superior group in art being superior because of certain factors peculiar to art ability.

Klar Group Scores. When the drawings had been rated by means of the Klar Scoring Device, it was found that the distribution of ratings conformed approximately with that for the adapted Kline-Carey test, the drawings made by the artistically superior group rating much higher than those made by the other two groups, which were again very close together.

This would indicate a rather high correlation of the adapted Kline-Carey Measuring Scale and the Klar Scoring Device for rating children's pictorial compositions.

ECONOMIC AND SOCIAL DATA

Attractiveness of Home Environment. The artistically superior pupils were found to come largely from suburban homes, from single or detached houses in pleasant quiet neighborhoods, while the equally intelligent, though less artistic, pupils were found to come largely from metropolitan areas where row houses (houses built together for an entire city block) prevail. The artistically inferior pupils were found to come from the metropolitan areas also, but from environments somewhat below those of the other two groups.

In the main, the artistically superior pupils were found to come from the most attractive homes.

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In the main, the artistically superior pupils were found to come from the most attractive homes.

the fathers of this group are more closely related to those of the third than of the first group is evidenced by the fact that the second and third groups have the vocations of tailor, grocer, and merchant in common.

Whereas but one of the mothers of pupils in each of the first two groups was found to be gainfully employed, 35 per cent of the mothers of the third group were found to be so employed, largely at occupations that are domestic in character.

Hobbies of Parents. Although the parents of all three groups of pupils had many hobbies, such as reading, in common, it was found that the list of hobbies of the parents of the artistically superior group contained such creative-activity items as the following: improves home, designs boats, draws, sews, paints.

Twenty-seven per cent of parents of children in the first group named some form of creative activity as their hobby, 10 per cent of the second group, and 20 per cent of the third group.

It is significant that but 12 per cent of the parents of artistically superior pupils were reported as having no hobby at all, while 25 per cent of the second group and 35 per cent of the third group were so reported.

Schooling of Parents. All the parents of the artistically superior pupils had attended school, whereas one or more of the parents of pupils in the other two groups had never been to school. Moreover, the schooling received by the parents of children in the first group was found to have been of a higher order and of a kind more conducive to the promotion of art interests on the part of their children. A mother of one of the artistically superior pupils had graduated from an art

school. Forty per cent of these parents had graduated from high school and 10 per cent from college.

Brothers and Sisters. The artistically superior pupils were found to come from the smallest families, three of them being each the only child of the parents. The pupils of equal general intelligence, though less gifted in art, came from larger families, while the artistically inferior pupils came from the largest families of all. In each of the second and third groups there was but one case of an only child.

The paired groups of equally intelligent pupils are much nearer together in respect to the number of brothers and sisters in the family, the average total number of children in the families for these groups combined being 42, as compared with 63 for the artistically inferior group.

Private Lessons in Art and Music. Thirty per cent of the artistically superior pupils were reported as having had private lessons in art, while but 5 per cent of the pupils of equal intelligence were so reported, and the artistically inferior group reported no private art lessons at all.

Forty per cent of the first group, 35 per cent of the second group, and 50 per cent of the third group were reported as having had private lessons in music.

Exhibition and Concert Attendance. Eighty per cent of the artistically superior pupils were reported to frequent art exhibitions, whereas but 65 per cent of the equally intelligent, though less artistic, pupils and 55 per cent of the artistically inferior pupils were so reported.

Attendance at concerts was found to be less frequent for all groups than attendance at exhibitions. Thirty per cent of the artisti-

THE DISCOVERY AND EVALUATION OF ART ABILITIES

cally inferior pupils were reported as attending concerts, while 25 per cent of each of the other groups were so reported. An inverse ratio for groups I and III was also noted in the two other instances where music was involved.

Musical Instruments Played. Twenty-five per cent of the artistically superior pupils were reported as being able to play musical instruments, while 40 per cent of the pupils of equal intelligence and 50 per cent of the artistically inferior group were so reported.

Picture-show Attendance. Over 40 per cent of all pupils included in the study were found to attend motion-picture shows on the average of a little oftener than once a week. The artistically inferior group of pupils attend somewhat less often than do the other two groups. Two pupils from the first and third groups and one pupil from the second group do not attend at all.

This does not seem to be especially significant.

Language Spoken at Home. Whereas English was the only language spoken in all but 15 per cent of the homes of the artistically superior group, and in all but 20 per cent of the homes of the pupils of equal intelligence who ranked low in the problem in visual art, a language other than English was spoken in the homes of 50 per cent of the pupils ranking lowest in the test. In spite of this, however, 35 per cent of the lowest ranking pupils in the art problem gave English as their favorite school subject.

In general, the children from the English-speaking homes made the best showing in the art problem.

Higher Education Contemplated. Thirty-five per cent of the artistically superior pupils contemplated entrance to an art school, while art school was not given as an educational objective by any other pupils included in the study. Since most art schools include teacher training in art, it is quite possible that some of these pupils look forward to art teaching as a career. Ten per cent of the artistically superior pupils give college as their educational objective.

It is interesting to note that 25 per cent of the pupils in the second and third groups give college as their objective, while 10 per cent in these groups give teachers college as their objective.

The Most Beautiful Things Erer Seen. The notistically superior group not only included in the list of most heautiful things seen more not objects, as opposed to natural objects, than did either of the other two groups, but these pupils were at the same time more imaginative and much more specific and articulate in expressing their opinions than were the members of the other two groups. In these respects, the equally intelligent pupils who made poor drawings ranked slightly lower than did the pupils who made the poorest drawings.

This is in accord with the conclusions of Newcomb who, in connection with her study of the growth of appreciation of beauty, was able to formulate five stages of progress, each characterized by increased ability in defining elements of beauty such as color, glitter, and movement.

CONCLUSIONS

Intelligent people do not always appreciate beauty. It is interesting to note, however, that the girl with an I.Q. of 122, who

Newcomb, Edith, "A Tentative Scale for Measuring the Growth of the Appreciation of Beauty in School Children," Forum of Education, June, 1931, p. 183 mentioned "a cobweb with dew on it in the sun," seems to have been able to interpret nature artistically even in the medium of words. The equally intelligent girl with whom she was paired in the study complacently mentioned "pictures" as the most beautiful things she had ever seen.

The artistically superior children were found to prefer artistically significant toys, and to prefer beauty in art to beauty in nature; were regarded by their art teachers as more persevering, accurate, and inventive than the other pupils. Art is their favorite subject and they were found to be superior not only in it but also in general scholarship. They have higher I.Qs. than the less gifted pupils, are more mature, attend exhibitions and concerts more frequently, and have more often received special art instruction outside of the public schools.

The education of the parents of these children has been not only more extensive but also of a higher order, in some instances including art courses. A larger proportion of these parents practice hobbies and engage in occupations that are artistically significant.

The artistically superior children were found to come from the smallest families, where English is the only language spoken, from neighborhoods that are the most beautiful in appearance; to engage in hobbics that are artistically significant, and to contemplate higher training to fit them for work as artists or teachers.

QUESTIONS FOR DISCUSSION

- What is the purpose of the Kline-Catey Measuring Scale for Free-hand Drawing? By what drawing scale was it preceded?
- 2. What did the Kline-Carey Scale contribute to the study described in this chapter?

- 3. How was the problem in visual art assigned to the ninth-grade pupils who were selected for the preliminary examination? How were they selected?
- 4. What is your opinion of the score card used in the preliminary study of talented children? How could it have been improved?
- 5. To what conclusions did the examination of children's drawings ultimately lead?
- 6. Describe the graduated stages of composition as discovered by Klar.
- 7. What kinds of data were secured for the boys and girls included in the major study? What method of grouping was employed?
- What relationship between general intelligence and intelligence in art did the major study indicate? Between maturity and art ability? Between the school averages and the art averages?
- 9. Of what significance in the study were the economic and social findings?
- 10. Of what value should the study be to the person who would guide boys and girls into suitable advanced courses in art or into art occupations?
- 11. What are some of the outstanding characteristics of children talented in art?

REFERENCES

- Bird, Milton, "A Study in Aesthetics," Harrard Monographs in Education, 11, 1932, Harvard University Press, Cambridge, Mass.
- Goodenough, F. L., Measurement of Intelligence by Drawings, World Book Company, Yonkers-on-Hudson, New York, 1926.
- Kinter, Madaline, and P. B. Achilles, The Measurement of Artistic Abilities, The Psychological Corporation, New York, 1933.
- Lowerenz, A. S., Relation of I.Q. and Mental Age to Certain Abilities Conditioning Success in Visual Art, Department of Psychology and Educational Research, Los Angeles City School District, June, 1928.
- McCarty, Stella, Children's Drawings, The Williams & Wilkins Company, Baltimore, 1924.
- Meier, N. C., "Diagnosis in Art," Thirty-fourth Yearbook of the National Society for the Study of Education, Chap. XXII, pp. 463-476, Public School Publishing Company, Bloomington, Ill., 1935.
- Munro, Thomas, "Art Tests and Research in Art Education," Western Arts Associotion, Vol. 17, No. 6, Dec. 1, 1933.

Books on the Arts

on years there has been an unfilled need for a short, popular, and authoritative bibliography on the arts, yet there is no subject that more richly repays reading and study, or in which there is a more active interest on the part of teachers and of students preparing to become teachers. The following lists of books are offered the reader in response to this genuine demand. Included are books on art of the ancient Americans, art in America, Mexican art today; Chinese, Persian, and Egyptian art; the art of Greece and Rome, Gothic architecture and sculpture, art of the Renaissance; modern painting, modern sculpture, modern architecture; home furnishing and decorating, water-color painting, pastel painting, oil painting, the appreciation of art, pencil drawing, pen-and-ink drawing, modeling for sculpture, industrial art, and commercial art. A list of periodicals is also included.

Each of these lists will be found to constitute an introduction to a particular field, mentioning first the more general books and progressing from these to the more specialized titles. It will be noted that the lists are divided almost equally between the history and appreciation of art and the specific techniques, such as pencil drawing and industrial art. They are based in part on a series of book lists first issued by the Enoch Pratt Free Library of Baltimore between 1936 and 1941. These book lists are no longer available, but many of the

titles taken from them have been combined here with those of other excellent works, most of which have been published since the appearance of the earlier lists.

ART IN GENERAL

ART OF THE ANCIENT AMERICANS

The only written records of pre-Columbian America are those contained in the few codices made by natives before the coming of the Spaniards, in the literary output of the first years of the Spanish occupation, and in the dated stone carvings found all over Middle America. Archaeologists and other students of those records have, however, uncovered enough data to give a fair picture of these early people. Their history turns out to be even more interesting than that of many other old civilizations brought to light by the spade.

Why is it that we know the details of ancient Greek and Egyptian life, but do not study the antiquities of our own hemisphere? We have our Palenque, our Cuzco, our Mesa Verde, our Chichen Itza. We have sculpture, pottery, jewelry, and textiles to compare with any. The ancient Americans had an accurate knowledge of astronomy, an advanced agriculture, and a social system that amazed the invading Spaniards. In a word, their history was distinguished and dramatic and should be better known.

ANCIENT AMERICANS: THE ARCHAEOLOGICAL STORY OF TWO CONTINENTS

E. C. Days

Henry Holt and Company, Inc., New York, 1931

If Americans ordinarily have no conception of the vast and fascinating history of this hemisphere before the bordes of Europeans arrived to exploit their New World, such a short but comprehensive story as this of the pre-Columbian era should awaken them to the possibilities of a neglected field. These stories of the Mayas, the Aztecs, and the Incas make the history of our own continent every

BOOKS ON THE ARTS

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THE AMERICAN INDIAN

CLARK WISSLER

Oxford University Press, New York, 2d ed., 1922

A good comprehensive summary of anthropological research in both North and South America. The whole culture of the Indians is analyzed and classified, beginning with their physical and social traits, and including their arts, mythology, and linguistics. It is interesting to know that 50 Indian languages are still spoken in the United States and Canada, 29 in Mexico and Central America, and 24 in South America.

The Museum of the American Indian, Heye Foundation in New York, occasionally issues books and leaflets about various arts and crafts, such as The Woodcareer's Art in Ancient Mexico, The Goldsmith's Art in Ancient Mexico, and Jade in British Columbia and Maska.

MEDIEVAL AMERICAN ART

PAL KELEVEN

The Macmillan Company, New York, 1946

The art of early civilizations of Asia, Africa, and Europe has long been marveled over, but the amazing achievements of the native people of America have gone largely unrecognized. Now these are lavishly spread before us in this book, which in text and pictures evaluates and displays the art wonders created by the red man before his contact with the white race—architecture on a grand scale; carvings comparable with those of India, Assyria, or Clima; intricate works in gold and silver; ceramics of exquisite design; delicate textiles—all produced with primitive tools by peoples who had no beasts of burden, to whom the wheel and plow were unknown. The period covered in the survey extends roughly from the beginning of our Christian era to Columbus's discovery of America. With the coming of the conquistadores this fabulous civilization, developed in isolation, came to ruthless destruction.

ART IN AMERICA

Unremitting labor was the lot of those who colonized America and under such conditions it seems paradoxical that painting should be one of the many crafts considered essential and transplanted to the new continent. Early portraiture imitated the established European titles taken from them have been combined here with those of other excellent works, most of which have been published since the appearance of the earlier lists.

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preference for uniform elegance and dignity. With Copley there is the first manifestation of that authentic strain of realism which characterizes America in painting, as in life. Early in the eighteenth century the exodus to the studios in London, Düsseldorf, Munich, and Paris began. By the latter part of the nineteenth century, painting no longer reflected the strength and forcefulness of the earlier school or the succeeding gentility, but had become openly vulgar. It was, according to Virgil Barker in his Whitney Museum pamphlet, A Critical Introduction to American Painting, one of two things: "What was copied by good little girls in boarding school or what was admired by bold, had men in barrooms." It was inevitable that the best work of the period would be done by those painting in isolation from a community which felt no need for them. Two themes recur throughout the history of American painting: it is a record of successive importations of European techniques, a factor not to be deprecated if the artist does not elevate technique to aesthetic supremacy but retains his capacity for fresh experience; and, finally, a record of our own affairs and our mentality.

AMERICA'S OLD MASTERS

JAMES THOMAS FLEXNER

The Viking Press, Inc., New York, 1939

For almost 250 years after the discovery of America, art played no part in American life. Then, between 1738 and 1755, four great painters were born in the Colonies. Despite Puritan distrust of images, despite the Revolution, despite a lack of adequate early teaching, or even adequate materials, all four rose to international renown. In this volume the author unfolds the amazing story of the four men whose brushes inaugurated American painting. Benjamin West, John Singleton Copley, Charles Wilson Peale, and Gilbert Stuart were not only phenomenal artists; they were all fascinating personalities. West, who openly supported the cause of the Colonists, was the intimate friend of George III; Copley, so timid he never made a personal friend, braved the wrath of the mob and tried to stop the Boston Tea Party; Peale, a Yankee Jack-of-all-trades turned artist, set up the

BOOKS ON THE ARTS

first mastodon skeleton ever seen by modern man; Stuart, a Tory, a debtor, a wastrel, a respecter of no man, painted the classic portraits of George Washington,

ART IN AMERICA

Edited by Holger Cahill and A. H. Barr, Jr.

Reynal & Hitchcock, Inc., New York, 1935

This survey of art from 1600 to the present day is adequately illustrated and has a hihliography covering every phase considered in the text. In addition to painting there are sections on sculpture, architecture, stage design, photography, and the motion picture.

THE HISTORY OF AMERICAN PAINTING

SAMUEL ISHAM

The Macmillan Company, New York, new cd., 1936

First published in 1905, this restrained and sane estimate of American painting has established a place for itself among the standard art books. In 1927, a new edition appeared with supplemental chapters by Royal Cortissoz, Islam correlated the development of painting with that of the country and divided it roughly into three sections: Colonial, Provincial, and Cosmopolitan. There are over 150 well-chosen illustrations and an excellent bibliography.

MODERN AMERICAN PAINTING

PEYTON BOSWELL, JR.

Dodd, Mead & Company, Inc., New York, 1948

This is primerily a picture hook of contemporary American painting made up of 86 large reproductions in color of the most significant painting that is being done in this country—introduced by 18 reproductions of America's "Old Masters." Following the American "Old Masters" come first the "American Scene" painters, artists who go out into the streets, fields, and the factories to paint America; then is shown the timely and significant work of artists whose theme is "social protest"; and next come the exponents of "pure art." In conclusion is shown the merging of the three currents of expression as they graphically chart the future. The great thing that this book shows, and it is the most exciting fact, is the actual existence, today, of a genuine "American School" of painting.

ILLUSTRATED MONOGRAPHS

AMERICAN ARTISTS

American Artists Group, Inc., New York, 1945

Twenty monographs on and by "America's foremost artists." These little books contain 50 to 60 filustrations each in gravure, a frontispiece in full color, and an introductory and explanatory text by the artist himself. Included in the series are

the following: John Sloan, Rockwell Kent, Thomas H. Henton, Max Weber, Waldo Peirce, Stuart Davis, Eugene Speicher, Edward Hopper, Alexander Breok, Gladys Rockmore Davis, Kuniyoshi, Bernard Karfiol, Charles Burchfield, John Steuart Curry, William Zorach, Doris Lee, Leon Kroll, Arnold Blanch, Raphael Soyer, Frederick Taubes.

CONTEMPORARY AMERICAN PAINTING

Encyclopaedia Britannica, Inc., Chicago, 1945

A representative group of American paintings of the last forty years are shown here in excellent reproductions, some in color, with photographs and biographical notes about the painters.

MEXICAN ART

In common with other agricultural peoples, Mexicans take pride in making beautiful things and making them well. The design and decoration of articles for use or ornament show how imaginative and cheerful the craftsmen are. Through the custom of decorating walls, Mexico excels in mural painting. The new painting is generally marked with realism; largeness and a monumental quality are two striking characteristics. Its balance, its brilliant yet harmonious colors, are intrinsically a product of Indian influence. This influence has been increasingly evident since the Revolution, which marked a return to pride in native traditions and work.

IDOLS BEHIND ALTARS

ANITA BRENNER

Harcourt, Brace & Company, Inc., New York, 1929

The short, vigorous life of the Syndicate of Painters and Sculptors; the painters license, Orozco, Rivera, Goitia, Charlot, and others figure in this animated history of art in Mexico.

TWENTY CENTURIES OF MEXICAN ART

Museum of Modern Art, New York, 1940

A survey of pre-Spanish, Colonial, modern, and folk art of Mexico, this book includes brief biographics of the artists mentioned.

MODERN MEXICAN ART

LAURENCE E. SCHMECKEBIER

The University of Minnesota Press, Minneapolis, 1939

A comprehensive survey of the revolutionary modern mural art of Mexico as well as a brilliant analysis of the history and the social trends that have produced it. With 216 large half-tone illustrations and two full-page color reproductions of mural details representing 22 of Mexico's most famous artists. Separate chapters on Rivera and Orozco.

CONTEMPORARY MEXICAN ARTISTS Agustín Velázquez Chávez
Covici, Friede, Inc., New York, 1937

In a hrief history of the rise of the present school of Mexican art, the author accounts for the strong nationalistic feeling which pervades most of its work. Biographical sketches are given of outstanding native Mexican artists, and several works by each are reproduced.

MADE IN MEXICO

S. C. SMITH

Alfred A. Knopf, Iac., New York, 1930

An excellent book for children about arts and crafts in the Mexican's everyday life.

CHINESE ART

The gulf which separates the Western reader from Chinese culture is indeed great. For centuries Occident and Orient have cultivated two different sets of aesthetic values. Where Western art has been largely preoccupied with the material aspects of life, that of the East has striven to catch its clusive spirit. China, in particular, has never broken with the primitive beginnings, and her art is still characterized by an absence of scientific curiosity and an all-embracing sympathy with every human thing. Man has been conceived of as harmonizing with the universe, rather than as dominating it. It is not surprising that her artists have excelled in the delineation of laudscapes and in exquisite small paintings of birds and flowers.

It is only within the last century that the real achievements of Chinese art have been revealed. European collectors of a few hundred

years ago, engaged in assembling "chinoiseries," missed its point completely and fastened on its more trivial manifestations. But with the enlightening discoveries of the archaeologists, with new translations of Chinese texts, with the advance of criticism and the growth of Oriental collections in the West, the history of Chinese art is being largely rewritten. The great International Exhibition of Chinese Art held in London during the winter of 1935-1936 demonstrated its popular appeal and gave a new impetus to the study of it in all the Western world.

CHINA MAGNIFICENT

MR9. D. O. CARTER

Reynal & Hitchcock, Inc., New York, 1935 Pive thousand years of Chinese art are condensed into an attractive little volume, many of the illustrations being of objects in American collections. The book is divided into three parts: "The Age of Magic and Ritual," "The Age of Faith and Splendor," and "The Age of Artisans and Traders." Of particular interest is the chapter on the Eurasian "animal style." CHINA

RENÉ GROUSSET Alfred A. Knopf, Inc., New York, 1933

One of a series of four volumes on the civilizations of the East, this book by the Director of the Musée Cernuschi is one of the best interpretive histories of Chinese art. Based on sound scholarship and an understanding of the Oriental mind, it is rather more difficult reading than the preceding book.

THE ROMANCE OF CHINESE ART THE ENCYCLOPAEDIA BRITANNICA, INC.

Doubleday & Company, Inc., New York, 1936

A selection of articles from the fourteenth edition of The Encyclopaedia Britannica, including, in addition to the more frequently discussed aspects of Chinese art, such subjects as jewelry, screens, enamels, ivory, lacquer, and brass ornamental

PERSIAN ART

The Western reader who would really understand Oriental art must temporarily put aside his Western canons of art. The arts of Persia are based upon decorative design, characterized by a refinement and splendor and an exquisite sense of the fitness of the design to the shape and the material. The concentration is upon pattern and line rather than upon naturalistic representation. There is a logical pattern adorned with superb color, for the Persians are masters of color. Even the characters of the alphabet have beauty and rhythm of line and are used for decorative purposes.

Interest in Persian art has grown greatly during the last few years. More people are realizing that it is an art worthy of profound study and that Persia has contributed a large share to the culture of the world.

The Persians were the most artistically gifted of all the races under Islamic rule in the Near East. Their art has shown an amazingly persistent vitality through the ages, in spite of repeated conquest, dreadful devastations, and foreign rule. Beautiful things have been made in Persia since ancient times. At Istakhr, near Persepolis, Dr. Herzfeld recently unearthed some beautifully painted pottery which he judged to be about 6,000 years old. The rich and splendid costumes of the Persians astonished the Greeks, and Horace speaks of their refined luxuries. In his notes on Persia, Marco Polo mentions the numerous artisans in the cities who manufacture a variety of silk and gold stuffs.

AN INTRODUCTION TO PERSIAN ART SINCE THE SEVENTH CENTURY A.D.

A. U. Pope

Charles Scribner's Sons, New York, 1931

A very readable and enthusiastic introduction by the Director of the American Institute for Persian Art and Archaeology. After the historical summary, he proceeds to architecture and its ornamentation, ceramies, painting, calligraphy, rugs, textiles, metalwork, other arts, and gardens. Final chapters discuss the formative factors in Persian art and the present state of the arts in Persia. The

Western reader, often puzzled by an art based upon decorative design, is led to an appreciation of its aesthetics and bistory.

A HANDBOOK OF MOHAMMEDAN DECORATIVE ARTS

M. S. DIMAND

Metropolitan Museum of Art, New York, 1930

The first general history of Islamic decorative arts in English. Ornament, painting, calligraphy, bookbinding, sculpture, woodwork, ivory, metalwork, ceramics, glass and crystal, textiles, and rugs are the arts included, illustrated with numerous reproductions of museum pieces. Only architecture is omitted. A great wealth of information in compact, convenient form.

EGYPTIAN ART

"Summing up the character of Egyptian art in a word, we might say that it represents, above all things, the idea of duration. Nature has decreed that all things should persist in Egypt, from the imperishable granite of her monuments to the most fragile objects of wood and stuff, preserved by the dryness of her climate. But the Egyptian himself was in love with the iden of duration. He built gigantie tombs like the Pyramids, impervious to the action of long ages, and temples with columns massive and manifold, and sloping walls like bulwarks.

"He embalmed his dead for eternity, placing beside them in the tomb statuettes of rare material, to serve them as companions; he carved and painted on the walls of tombs and temples historic, religions, and domestic scenes, destined to perpetuate the memory of the history of the gods, of the mighty deeds of kings, of the ritual and

THE SUCCESS OR PAILURE OF THE ART EDUCATION PROGRAM DEPENDS TO A GREAT EXTENT ON THE BOOKS AND HALSTRATIVE MATERIALS AVAILABLE FOR REFERENCE BY THE STUDENTS, Boys and Girls at Work in Art Department of the Enock Prair Free Library of Ballimore.



familiar life of his day." Salomon Reinach, the great French art historian, thus interprets that feeling of dignity and serenity which is so marked a characteristic of Egyptian art.

The best of all guides to a knowledge of Egyptian art and craftsmanship, as to all art, is to see the things themselves, perhaps in a museum, or, if that is impossible, to see the best reproductions of them which can be procured.

ART IN EGYPT

SIR G. C. C. MASPERO

Charles Scribner's Sons, New York, 1939

An excellent handbook with 565 small illustrations arranged chronologically, with running commentary of notes emphasizing the differences between various periods and schools. The treatment of architecture is unusually full. One of the Art Una series.

G. P. Putnam's Sons, New York, 6th rev. ed., 1926

MANUAL OF EGYPTIAN ARCHÆOLOGY

SIE G. C. C. MASPERO

In 1887 when this manual was first published in English, it was described as a "picturesque, vivacious, and bigbly original volume, as delightful as if it were not learned, and as instructive as if it were dull." It still seems so today. The work of the ancient Egyptians in architecture, tomb-making, painting, sculpture, and industrial arts is discussed, and it is illustrated by 342 small engravings and photographs.

THE ART OF ANCIENT EGYPT

Oxford University Press, New York, 1938

One of the Phaidon publications remarkable for the quality of their illustrations and for their inexpensiveness.

THE ART OF GREECE AND ROME

"If you look at a Greek statue or bas-relief, or if you read an average piece of Aristotle, you will very likely at first feel bored. Why? Because it is all so normal and truthful; so singularly free from exaggeration, paradox, violent emphasis; so destitute of those fasci-

nating by-forms of insanity which appeal to some similar faint element of insanity in ourselves." So Gilbert Murray, one of the great classicists of our time, wrote some years ago when we were, perhaps, less insane than we are now. His words point straight to the difficulty and the charm of classic art. The Greeks were the first to develop the thoughts which became fundamental to our way of looking at the world. They were still very keen about the great commonplaces. If we will but remember that these were not commonplaces to them, and that, whether commonplace or not to us, they are still great and greatly expressed, we can experience, through their art, some of the same fresh keenness which they felt.

THE ART OF THE GREEKS

H. B. WALTERS

The Macmillan Company, New York, 3d ed., 1934

Each of the major and minor arts of Greece is treated fully. The author was Keeper of Classical Antiquities at the British Museum, and his book is popularly written and well illustrated.

THE GRANDEUR THAT WAS ROME

J. C. STOBART

Sidgwick & Jackson, Ltd., London, 1934

The author gives a new virility to his theme. His book is worthy of its subject, namely, to weigh the value of Rome's contributions to the lasting welfare of mankind, and to apportion Rome's importance in the progress of civilization. Mr. Stobart treats not only the Roman Republic, as is frequently the case, but devotes equal space to Imperial Rome, to which the Republic was a mere preface. Illustrations form an integral part of the author's method of presentation.

ART IN ANCIENT ROME

E. S. STHONG

Charles Scribner's Sons, New York, 2 vols., 1928

Understanding and appreciation of Roman art began only some forty years ago, after the history of Greek art had been pretty thoroughly studied. Thanks largely to Mrs. Strong's efforts, we no longer think of Roman art as a degenerate copy of better Greek work; instead, we recognize that Rome made a definite contribution

of her own to the history of art. The two volumes (in the $Ars\ Una\ series$) contain nearly 600 small illustrations.

THE DAILY LIFE OF THE GREEKS AND ROMANS

THE METROPOLITAN MUSEUM OF ART

Metropolitan Museum of Art, New York, 5th ed., 1933

It is interesting and important to know how art actually touched the life of the people, how it was used; and it is likewise interesting to learn from art objects many of the details of everyday life. This publication of a great museum is popular and well illustrated.

THE GOTHIC SPIRIT IN ARCHITECTURE AND SCULPTURE

The man of the Middle Ages has been imagined to be a slowwitted creature, semiconscious because he was semicivilized, and hampered by numerous superstitions forced upon him by the church. Actually, he was intelligent, energetic, and extraordinarily constructive, using to advantage the means that were at his disposal, and laying foundations which influence the structure of society today. The Church gave direction to his energies and talents, and relieved him of many difficult problems by imposing order and unity upon the peoples of Europe. That is why medieval art is mainly religious. Religious teachings and history were pictured in carvings of stone, wood, and other materials. The Gothic passion for learning and encyclopedic knowledge was transferred into carvings on cathedrals, to the delight of the people. Another lasting influence on medieval thought came from the East, brought by Crusaders and merchants. Oriental designs undoubtedly helped to quicken the observation of nature, which is a characteristic of Gothic art.

ART AND THE REFORMATION

G. G. COULTON

Oxford University Press, New York, 1928

A full, fascinating, and interesting work, containing authoritative material regarding the conditions under which Gothic artists worked. Dr. Coulton quotes exten-

sively from contemporary writings about the medieval artist and his work, as well as from later ones. He holds that medieval art lost its intensely religious character as a natural evolutionary process, rather than as a result of the Reformation.

GOTHIC ARCHITECTURE

E. A. BROWNE

The Macmillan Company, New York, 2d ed., 1928

Northern Europe was the source of Gothic architecture. The story of its spread over all Europe is simply told, with emphasis on the architectural characteristics of various countries and of the Gothic style in general. Many of these characteristics are illustrated by the 48 plates of famous buildings, with interesting notes about their history and architecture.

A HANDBOOK OF ENGLISH MEDIEVAL SCULPTURE

ARTHUR GARDNER

The Macmillan Company, New York, 1935

Not only time and weather have done their destructive work on medieval sculpture and architecture in England, but an anti-church Parliament destroyed methodically a great deal of exterior sculpture. Therefore, Mr. Gardner includes small sculptures, effigies, and the decorative work of goldsmiths, ivory workers, and other craftsmen in this book. It is based on a monumental work on the same subject published in collaboration with Professor E. S. Prior. It is, however, entirely rewritten and excellently arranged, with nearly 500 illustrations.

ART OF THE RENAISSANCE IN ITALY

For many centuries Italy was the fountainhead of civilization in Europe. Young men were sent there to school; older successful men were called there to work. Artists, writers, artisans and experts in all fields went from Italy to other countries carrying their special skills and knowledge to the barbarians.

This was not only because the Catholic Church, the great international organization during this period of growing nationalism, lad its center in Italy. Nor was it only because the existence of Roman

remains and the influx of scholars, driven from Byzantium by the Turks, supplied a direct link between Italy and the classic past. Neither can the whole explanation be found, as some modern students maintain, in the fact that modern banking and capitalism originated in Italy, and that Italy was the world center of commerce and trade. But these three factors, working together, caused a ferment which resulted in a civilization as vivid as any the world has ever seen and in no field were its achievements more lasting than in the arts. Italian Renaissance painting and sculpture are almost as influential today as they ever were. Some moderns prefer one school or period of Italian art, some another; each generation reinterprets the whole development in a new sense—but for all the Italian Renaissance keeps its fascination and its power as the source of almost everything, good or bad, in art down to our own time.

A SHORT HISTORY OF ITALIAN ART

ADOLFO VENTURI

The Macmillan Company, New York, 1926

Only a learned and profound scholar could tell the whole story of Italian art in less than four hundred pages. Naturally most of the book is devoted to the Renaissance, but, unlike many works dealing solely with that period, Venturi's shows the continuity of Renaissance and medieval art.

AUTOBIOGRAPHY

BENVENUTO CELLINI

Various translations and editions

Cellini was "the first goldsmith of his time, an adequate sculptor, a restless traveler, an indefatigable workman, a Bohemian of the purest water, a turbulent bravo, a courtier and companion of princes. . . . From the pages of this book the genius of the Hennissance, incarnate in a single personality, Icans forth and speaks to us."—J. A. Symonds.

ART IN THE EIGHTEENTH CENTURY

Grace, charm, cultivation, restraint—these are some of the qualities we ordinarily attribute to the eighteenth century. And rightly so; yet beneath the very real screnity suggested by these adjectives there are at work in the world tremendous forces, preparing violent up-heavals in the arts no less than in society. The charm of the eightcenth century is the charm of perfection, too perfect to last; its grace and cultivation, that of an ancient aristocracy which had outlived its power and was about to collapse. For the industrial revolution was undermining the structure of society. Beginning in England even before the century itself, it found violent expression in the French Revolution, and achieved definite political recognition with the great English Reform Bill of 1832. Very interesting it is, in studying eighteenth century art and literature, to see emerge first at one point then at another, more and more frequently as the century progresses, the signs and portents of the great changes that were going on beneath the surface.

Art wore many aspects during this long period, and different ones in different countries. But although there was no single predominating school, there was a certain kinship of spirit between the several schools and the various arts. The books listed below will not give a comprehensive picture of the period, for which the reader would need to consult appropriate portions of many general histories of nrt. They are selected because they try to define one or nnother aspect of the eighteenth-century spirit, or because they deal with certain arts peculiarly characteristic of the century.

FRENCH PAINTING AND SCULPTURE OF THE XVII CENTURY

THE METROPOLITAN MUSEUM OF ART

Metropolitan Museum of Art, New York, 1935

The record of a very musual exhibition which contained works borrowed from the most important collections in this country and France. There are 118 illustrations. The painters are reviewed briefly by Harry Wehle, the sculptors by Preston Remington, both of the museum staff.

ENGLISH ART IN THE XVIII CENTURY

C. R. GRUNDY

The Studio Publications, Inc., New York, 1928

One of the series Great Periods in Art, this book summarizes the artistic achievement of eighteenth-century England in eight chapters covering painting, miniatures, sculpture, engravings, architecture, furniture, metalwork, and ceramics. There are 89 plates well reproduced in black and white.

MODERN PAINTING

One of the great functions of art is to reflect for each generation its own mind and spirit and, in reflecting, help to form and extend it. It expresses, sometimes unconsciously, the hasic attitudes and feelings of the culture which nourishes it. And when these attitudes and feelings are changing, there are always artists ready to mirror the changing mind and spirit, to seek and discover the new culture arising from the old. Today we seem to be going through a period of rapid change, with much conjusion resulting from the abandonment of old standards. People are seeking new certainties, testing new values, forming new attitudes. Art, especially painting, in recent decades has reflected both the uncertainty and the search for a new certainty. There have been wild experiments in many directions, herce controversies between the old and the new, and factional strife between the various new schools. Thus, contemporary painting offers a rich field for those who seek to understand the mind of our time, with all its contradictory tendencies, and to foresee its probable goal.

THE STORY OF MODERN ART

SHELDON CHENEY

The Viking Press, Inc., New York, 1947

In . I World History of Art, Cheney swept his eyes over the whole field. Now he brings them to focus on a single vista of the panorama which is his special favorite. The wealth of illustrations and the excellent typography make it one of the most attractive volumes on modern art. This book is illustrated by approximately 300

large plates. Each picture is selected as much for the immediate pleasure it gives as for the clarity with which it explains some historical point or individual peculiarity. They are printed with the accuracy and brilliance that modern methods make possible. All the outstanding artists discussed are represented, and special groups of pictures are included for such key men as Daumier, Whistler, Cézanne, and Van Gogh.

PAINTERS OF THE MODERN MIND

M. C. Allen

W. W. Norton & Company, New York, 1929

A readable interpretation for the general reader that is both clear and concise.

THE MODERN MOVEMENT IN PAINTING

T. W. EARP

The Studio Publications, Inc., New York, 1935

A history of the modern movement, cleverly contracted into 48 pages, clearly written, well balanced—this hook will be a boon to many who are making their first acquaintance with the subject. There are 16 reproductions in color.

MODERN SCULPTURE

To create form out of a mass of stone, wood, or elay is the object of the sculptor. In working with stone and wood this becomes a process of cutting away and eliminating; with elay, a matter of building up. But the aim is the same—to create simple patterns into formal, harmonious lines.

Many sculptors today feel that the purest unity of form and concept can be achieved only through geometrical compositions. Others adhere to many of the traditional principles of the past and concern themselves with the attainment of formal beauty through less severe arrangements of line and plane. But whether it be a portrayal of the essential character of natural objects or an experiment in the strict geometry of form, contemporary sculpture is vital, significant, and often challenging.

WILLIAM ZORACH

ZORACH EXPLAINS SCULPTURE

American Artists Group, Inc., New York, 1947

All the wonder of great sculpture is explained in simple terms and fascinating intimacy by a great American sculptor: how sculptors work, and why their creations take the form they do. The anthor has opened the door to an exciting world of enjoyment and stimulation. This volume includes over 180 beautiful half-tone plates and more than 200 line drawings, an incomparable record of sculpture from primitive to modern times; a vast and graphically illustrated fund of technical information describing every step in the process of sculpture with full descriptions of tools and material, and where to find them.

THE MEANING OF MODERN SCULPTURE

R. H. WILENSKI

Frederick A. Stokes Company, New York, 1932

Believing that the prevailing prejudices in regard to modern sculpture impede the comprehension and appreciation of creative contemporary work, Mr. Wilenski, in this provocative study, attempts to prove his theory that the Greeks did not produce the final perfection in sculpture and that in breaking away from classical traditions, the creative modern sculptors are achieving unity of form and vitality through geometric compositions and direct carving. Stimulating but highly controversial.

SOME MODERN SCULPTORS

STANLEY CARRON

Oxford University Press, New York, 1928

A general survey of what a few leading sculptors have done in recent years, and an appraisal of the artists whom the author believes to have had the greatest influence on contemporary sculpture. Short comments are given with each of the plates illustrating the works of these artists.

THE NEW ARCHITECTURAL SCULPTURE

W. R. AGARD

Oxford University Press, New York, 1935

A noteworthy discussion of the significant achievements in architectural sculpture during the past twenty years and an analysis of the relation of sculpture to architecture. Includes only that sculpture which has been created for buildings evolved in the contemporary architectural style.

MODERN ARCHITECTURE

Modern architecture is a battlefield. Only recently has this come to be generally so, for most men did not in the past dispute about the "architecture" of their buildings. They simply built them. Today, architects and their employers are perplexed by many problems. The different statements of these problems, above all the widely different solutions, make the books about modern architecture highly interesting reading.

Should the architect's primary aim be to please the eye of the onlooker—or, rather, to suit the convenience of the persons who will use the building? Is architecture something special to be saved up for great public buildings, churches, homes of the rich—or is it the duty of the architect to take all building for his province and to work for the creation of cities and towns, beautiful in their smallest details? Is there a form of decoration inherent in the sensitive use of modern materials and techniques, dependent alone upon proportions, texture, and color? Do the classic buildings which swept the United States after the Chicago World's Fair in 1893 reflect a developing American artistic sense—or merely the vulgarity and pretentiousness of a newly rich aristocracy? Do the newest buildings, in their bareness and simplicity, testify to man's surrender of his humanity to the machine—or to the hope for a new society intelligently organized for work and play?

Such are some of the problems agitating contemporary architects and critics. They go deeper than matters of style or period, to the fundamental problems of social life, of which architecture is a most revealing manifestation. THE ENJOYMENT OF ARCHITECTURE

T. F. HAMLIN

Charles Scribner's Sons, New York, 1921

This book tells the neophyte "how to appreciate architecture." Incidentally, it conveys a great deal of interesting information about the history of architecture. It is written always for the person who must take his architecture as he finds it, in the streets of our modern American eities.

THE INTERNATIONAL STYLE: ARCHITECTURE SINCE 1922

H. R. HITCHCOCK and PHILIP JOHNSON

W. W. Norton & Company, New York, 1932

An analysis of the principles underlying the latest phase of Modernism. The authors distinguish three principles underlying the "International Style"; emphasis on volume or space, rather than on solidity; regularity, as opposed to symmetry; and elegance of material, technical perfection, and fine proportions, as opposed to applied ornament. The photographs are excellent.

MODERN BUILDING

W. C. Benrendt

Harcourt, Brace & Company, Inc., New York, 1937

This interesting volume is a basic introduction to the understanding of the steps by which modern architecture has reached its present forms,

TOMORROW'S HOUSE

George Nelson and Henry Wright

Simon & Schuster, Inc., New York, 1946

Complete information about how to plan a new home, how to remodel the present home, and how to make the best use of the latest material, equipment, and appliances. The authors demonstrate that modern houses are no longer in the dream world of tomorrow.

DESIGN IN MODERN LIFE

To the open eye the manuscript of a fine piece of music, the blueprint of a well-planned house, are in themselves beautiful and satisfying as abstract designs. The same is true of the forms of everyday objects whose excellence is organic and evidenced in outward appearnnec ns well as in function. The economy and stripped practicality of

a propeller, the order of the pots and pans on the white wall of a kitchen, hold perhaps more of beauty to eyes not closed by prejudices than the treasures in an eighteenth-century salon or in the official museums.

A BROAD VIEW

ART AND SOCIETY

HERBERT READ

Published by the author, New York, 1937

An illuminating survey of art from prehistoric cave paintings to surrealism and other movements of today, which reveals the nature of art and the function of art in society.

TECHNICS AND CIVILIZATION

Lewis Mumford

Harcourt, Brace & Company, Inc., New York, 1934

History of man as seen through the development of his inventions, "a record of man's achievement in making tools and machines and conquering nature through the medium of modern theoretical and applied science," Mr. Mumford classifies human culture into three phases—the cotechnic or water and wood; the palcotechnic or coal and iron; the neotechnic or electricity and alloy—and he seer visible on the edge of the horizon the advent of the biotechnic phase with its complete integration of the machine with human needs and desires.

ART AND THE MACHINE

Sneldon and Mantha Cheney

Whittlesey House (McGraw-Hill Book Company, Inc.), New York, 1936
An admirable survey of industrial design in twentieth-century America showing
the emergence of modern design as a union of two streams of influence—abstract
art and American engineering.

INDUSTRIAL DESIGN AND THE FUTURE

C. G. HOLME

The Studio Publications, Inc., New York, 1934

A questionnaire, unswered by manufacturers, architects, advertising agency officials, and professors of design as to the relation of designer to industry, his remuneration, and other cogent subjects, has been summarized to make this survey. Eighty pages of text, 80 pages of illustrations.

HOME FURNISHING AND DECORATING

In furnishing and decorating a home the man or woman of today considers, first of all, comfort and convenience, while bearing in mind the fundamental principles of decorating which must be followed in creating a house in good taste which will express grace and charm as well as the individuality of the owner. A preliminary study of such essential elements as unity, line, form, color, balance, emphasis, scale, proportion, and texture helps considerably to lighten the long and arduous task of selecting the furniture and furnishings. It is often amazing to the amateur to find what results may be obtained by such means as clever lighting, the arrangement of furniture, or the use of color, to accentuate the spaciousness of a room.

The International Exposition of Modern Decorative and Industrial Arts held in Paris in 1925 helped to awaken the American people to the trends of Modernism. As a result of experiments by modern designers, glass, metal, and other materials new in decoration are slowly finding their place in our homes. The emphasis of the modern interior decorator is on simplicity, striking color combinations, and the elever use of textures.

INSIDE YOUR HOME.

DAN COOPER

Farrar, Straus & Co., Inc., New York, 1946

A gay and succinct handbook for the millions who now wish to decorate or rehabilitate their homes with or without professional air. Stressing the principle that what is appropriate for one family may not be appropriate for another, the author states effectively that there is inherent good tasts in all of us, and that it should and must find expression in our homes. Here is a decorating manual that opens to the layman the world of his own ideas, providing him with a practical blueprint for thinking and planning.

REFURBISHING THE HOME

C. G. B. KNAUFF

Whittlesey House (McGraw-Hill Book Company, Inc.), New York, 1938

The author advocates a modernized training in the decorative arts and hand training which will prepare the coming generation to serve both the artistic and the practical needs of the home. He deals with each subject separately, as floors, painting walls, upholstery, lighting problems, and period styles.

ELEMENTS OF INTERIOR DECORATION

Sperrill Whiton

J. B. Lippincott Company, Philadelphia, 1937

Beginning with prehistoric art and ending with present day, Mr. Whiton's book offers a broad conception of decorative art, embracing not only historical background, but also manners and customs of various peoples in the Western world.

PAINTING

WATER-COLOR PAINTING

In its present form water-color painting is a young art. Paint mixed with water has been used since the time of the Egyptians, but painting with clear water color on paper first became a means of expression in the eighteenth century, when the carefully tinted topographical drawings of the time developed into the free and colorful work of such men as Cozens, Turner, and De Wint. This medium has had marked effects on oil painting, tending to lighten color and encourage a free and more direct use of the brush. Which is the more difficult medium, water color or oil paint, and which is the more distinguished? Artists disagree. An interesting explanation offered for the popularity of the medium in England is that the climate there has aided the water colorist favorably in his use of the paints. Some books are valuable for their far-reaching suggestions and clarification of fundamental principles which underlie good painting. Others give practical directions for the use of technical problems. Both kinds

are represented here, as well as those which combine the qualities of

WATER COLOR PAINTING

ADOLF DEHN

The Studio Publication, Inc., New York, 1945

The beginner as well as the advanced student can learn the "ins and outs" of water-color painting from this concise, informative book, A prolific painter in water color, the author has become a successful exponent of this medium, without having had to compromise his style. Besides being a treatise on "how to do it," this is also an interesting book about the artist himself, with numerous illustrations in color and hall tone of some of his most successful paintings. A lurther selection of water colors by other well-known American artists whom the author admires is included to form an interesting comparison of styles and techniques.

THE ART FOR ALL WATER COLOUR SERIES JOHN LITTLEJOHNS

Pitman Publishing Corp., New York, 9 vols., 1928

In this series Mr. Littlejohns strikes a happy ratio between his illustrations and text. The illustrations are numerous, admirably simple, and show successive stages of completion. Concise brief directions are given in each book. The easiest is Vol. 3: Fruit, and probably the most difficult is Vol. 6: Mountains and Valleys. Others are: Vol. 1: Landscape; Vol. 2: Flowers; Vol. 4: Trees; Vol. 5: Boats and Ships.

MAKING WATERCOLOR BEHAVE

ELIOT O'HARA

Minton, Balch & Co., New York, 1935

The spelling and grammar of water-color painting are provided by the author, and lie expects the student to produce ideav. This book gives more general information about technique, materials, and outdoor painting than Making the Brush Behare and contains a comprehensive discussion of pigments, their permanence, and qualities.

PASTEL PAINTING

There are three schools of method in pastel painting. One advocates rubbing pastel more or less into the paper; another will not tolerate rubbing, but teaches a skillful juxtaposition of colors; the

third will permit either of these methods and any other which seems to express hest the artist's conception. He who studies pastel painting through the use of hooks may find himself adopting with enthusiasm the viewpoint of an author who is convinced of the truth of one of these methods. Later, perhaps, he searches for more advice to improve his technique, only to find that the next author helieves in a different method. After trying several methods the student will discover which suits him hest.

Pastelists achieved a fine style in the eighteenth century, not excelled until the end of the nineteenth, when Degas produced the lovely pastel paintings which his friends compared with butterflies' wings.

PASTEL PAINTING

GLADYS R. DAVIS

The Studio Publications, Inc., New York, 1943

This book fulfills a definite need for a good contemporary text on how to paint in pastels. The author's work in pastels is renowned throughout the country through traveling exhibitions, articles in color in various magazines, and her Christmas cards. Her paintings are owned by leading museums and private collectors from coast to coast. In a simple, direct text the author gives the "do's" and "don'ts" of pastel painting, analyzes the work of other pastelists, and gives a brief history of this craft.

R. C. Nuse and F. W. Wenen A TREATISE ON PASTEL PAINTING

F. Weber Company, Philadelphia, 1936

A very good little manual for the art student. Landscape study and color are treated in greatest detail, but portrait painting, still life, composition, and textures come in for their share of consideration. Some solutions are offered to the troublesome problem of caring for finished pictures.

COLOUR SKETCHING IN CHALK

DONALD MAXWELL

Pitman Publishing Corp., New York, 1934

Most people enjoy using color, although they are easily discouraged by the mechanical inconveniences of sketching with water color or oil paints. Sketching

with crayons or half chalk, as Mr. Maxwell points out, requires a minimum of equipment and possesses the charm of novelty. His delightful drawings illustrate many books of travel. All the sketches and suggestions in this book are concerned with landscape drawing, and sketching experience is presupposed.

OIL PAINTING

More than at any previous time, with the possible exception of the Pre-Raphaelites, artists today are experimenting with methods of painters, of past centuries, as far as they are known either through modern research or from early writings. Fresco, tempera, wax, and other kinds of painting call to mind certain schools in the history of painting, each of which used one of these methods alone. A knowledge of some or all of them has been found desirable by the leading painters of the last half century. Although the use of pigments ground in drying oils was discovered in Italy some time between the ninth and the eleventh century, this medium was not employed exclusively for complete pictures until the seventeenth century. In the intervening centuries, painters experimented with, or used as tried and true methods, combinations of oil and tempera.

In oil painting much depends on the selection and use of materials which are correct from a chemical standpoint. Also their selection should be made in keeping with the dictates of sound craftsmanship. After that, the artist can use to the best advantage the knowledge, skill, and talent he possesses.

The study of books which describe paintings in terms of the painter, and frequent examination of actual paintings will help the student to share with the painter some of the special enjoyment experienced by those who know how paintings are made.

PAINTING AS A HOBBY

S. D. Thach

Harper & Brothers, New York, 1937

Although he reduces instruction in oil painting to its simplest terms, the author includes the essential elements, drawing, color, and composition, with special emphasis on color. His advice concerning materials is very practical, and he makes suggestions for still life, landscape, and portrait painting.

COMPOSITION

A. W. Dow

Doubleday & Company, Inc., New York, 19th ed., rev. and enl., 1938

The art of composing pictures well is a talent not possessed by all, but it is possible to avoid making a poorly composed picture by applying certain rules of composition and structure. Although this was written in 1899, it remains the outstanding book in its field; the publishers plan to reprint it soon. A series of exercises is presented for the use of students and teachers. The elements of composition are described concisely yet completely, and are well illustrated by drawings, photographs, and colored plates.

THE MATERIALS OF THE ARTIST

MAX DORNER

Harcourt, Brace & Company, Inc., New York, 1934

Practically an encyclopedia of the technique of painting, this is full of scientific information about composition of pigments, about grounds to work on, brushes, mediums, and methods of applying paint to canvas, wood, brick, stone and Portland cement walls, and other materials. This important, authoritative treatise is the result of much research by the author, who is professor in the Academy of Fine Arts in Munich. His chapters on the techniques of old masters and on methods of restoring old canvases will be useful to others besides painters.

THE APPRECIATION OF ART

The American painter, Whistler, once became greatly perturbed over an old lady who was pointing out good and bad pictures at nn exhibition. "Well," said the old lady, "I may not know anything about art but I certainly know what I like." "A prerogative, Mndam, shared by the lower animals," replied the artist.

The phrase of the dauntless old lady has been repeated again and

again by many whose aesthetic education has been comparatively neglected. The popular judgment of a painting is most frequently based on its resemblance to nature or its association with a familiar subject. It is difficult to dissociate subject matter from essential art elements (whatever we may consider them to be), and yet it is generally conceded that there must be something which distinguishes a great painting from a good photograph.

No list of books can furnish an easy key to the true secrets of appreciation-secrets that are not always the same for any two readers. It may help, however, to create an unprejudiced attitude toward a subject on which there are many varying opinions, and to emphasize the fact that taste is acquired but slowly.

A WORLD HISTORY OF ART

SHELDON CHENEY

The Viking Press, Inc., New York, 1947 For enjoyment or information, this work has become the standard one-volume history of art. In art as in other fields, tastes change from generation to generation, judgments are revised, fresh talents are recognized. For an educated man it is not enough to have had even a fairly good knowledge of art, if it is allowed to grow dusty with time. And for the novice it is of the utmost importance to he introduced to art through the eyes of today. Cheney undertook his world history primarily with this in mind—he presents the art of the ages in the perspective of our own time. Beyond this primary merit, the special virtues of this work are manifold: its completeness (including painting, sculpture, and architecture; Oriental art, archaic and primitive art, and often-neglected hyways such as fabrics); the fullness and beauty of the reproductions (a world history in themselves); readability; typographic excellence; convenience of arrangement;

THE ART IN PAINTING

ALBERT C. BARNES

Harcourt, Brace & Company, Inc., New York, 1937

This book sets forth a method by which an understanding and appreciation of paintings may be secured. It is the fruit of association with paintings and of study of psychology, aesthetics, and the principles of education. It contains a

general account of aesthetic principles, a specific statement of those principles in the field of plastic art, and an application of them to the more important schools and individuals in paintings. The conclusions reached are reinforced by illustrations, of which there are 122. They show that the essential values of plastic art are the same in all periods, that the qualities that made Giotto, Titian, and Remhrandt great painters are to be found also in Renoir and Cézanne, Picasso, and Matisse.

EXPERIENCING PICTURES

R. M. PEARSON

Harcourt, Brace & Company, Inc., New York, 1932

A modernist, an artist, and a teacher, Pearson is well known for his activities in the design workshop at the New School for Social Research in New York City. The structural devices—form, line, space, and color—employed by artists to design a painting are presented by Pearson as an approach to the way of "experiencing pictures." Will require some study on the part of the layman.

PENCIL DRAWING

At once the simplest, cleanest, and cheapest of mediums, the pencil is perhaps the most widely used by students of drawing. Although its rigidness causes it to lack the sensitiveness of the brush, its possibilities in line drawing make it an especially valuable medium for delicate work requiring great accuracy. All who strive toward a mastery of draftsmanship use a pencil constantly. Pencil drawings are often made by way of preparation for pictures which are intended to be reproduced in other forms, such as etchings, engravings, book illustrations, architectural drawings, and drawings for ndvertisements.

PENCIL SKETCHING

EVELYNE GEEN

Pitman Publishing Corp., New York, 1930

This is a "hobby book" designed for use by the amateur-beginner who wants to get some fun out of sketching. Written in a very chatty, informal way, it encourages individual expression, whatever the result.

F M. RINES

DRAWING IN LEAD PENCIL

Brigman Publishers, Pelham, N. Y., 1929

Instruction in pencil drawing of outdoor scenes accompanied by sketches by the author, who excels in bold effects and rapid sketches. Simpler drawings in full scale are in Rines Pencil Sketches (15 plates, Bridgman Publishers, Pelham, N.Y., 1935).

SKETCHING AND RENDERING IN PENCIL

A. L. GUPTILL

Reinhold Publishing Corporation, New York, 1922

This is the most comprehensive work on the pencil as a medium in drawing. It is based on lectures prepared by the author when he was instructor at Pratt Institute. The lectures were for classes in general art, architectural design, and interior decoration. The book is copiously illustrated by well-known artists, as well as by the author, with reproductions selected to illustrate some principle of composition or some suggestion for technique given in the text.

PEN-AND-INK DRAWING

Pen-and-ink drawing has two unique advantages over work in other mediums. One is that even the slightest sketch gives an effect of permanence, finality, even of finish; the other is its quality of being easily reproduced. The reproduction is almost identical to the original in appearance. Many a beginner who struggles over pen drawing, at first finding it still and uncompromising, may take comfort in the fact that technique, like that in handwriting, naturally becomes the sign of individual sense and feeling. This happy state is reached sooner or later depending on the amount and kind of practice which has been accomplished by the student.

The nrt of pen-and-ink as we know it began with the outline drawing of architectural forms by a thirteenth-century draftsman. Some of the old masters whose pen-and-ink work will repay study are Pollainolo, Botticelli, Leonardo da Vinci, Rubens, Van Dyck, Rembrandt's drawings in pen-and-wash have never been equalled. The

work of later artists is reproduced and discussed in the following books.

PEN DRAWING

A. L. GUPTILL

Watson-Guptill Publications, Inc., New York, 1937

Common-sense instruction arranged to be of use to the beginner is supplemented by black-and-white drawings. These examples are arranged first with simple pen strokes, progressing through small objects and interiors to landscapes and people. Those who like to keep a file of their black-and-white sketches will find the author's Pen Drawing Portfolio (13 plates, Spencerian Pen Co., 1934) full of suggestions for the selection and arranging of drawings, and of technical instruction.

PEN DRAWING

C. D. MAGINNIS

Bates & Guild Company, Boston, 9th ed., 1932

A full and clear discussion of materials, technique, and the problems of the student makes this an excelleat manual. The author, a distinguished artist, also points out certain principles of good pen drawing and stimulates an appreciation of fine work through his analysis of drawings by such men as Pennell, Vierge, and Railton. Their drawings are reproduced well. Landscape, architectural, and decorative work receive the most attention, and useful suggestions are offered for drawing from photographs.

MODELING FOR SCULPTURE

Modeling is that preliminary stage of a work of sculpture which involves its actual creation in a plastic material in anticipation of its subsequent reproduction in a more permanent form. The translation of the sculptor's model into hard material is commonly made by others than himself. The plaster east is the work of a professional molder; the bronze is east and finished in n foundry especially organized for that purpose; even sculpture in stone is frequently carved almost entirely by workinen who point it up from a plaster model.

Thus it happens that, despite the work of many distinguished contemporary artists who carve, as Michelangelo did, directly in

marble, granite, or other stone, the sculptor's art today is very largely the nrt of modeling. Nor is this a lesser art than carving-merely a different one. Certain artistic conceptions offer a more tempting exereise for the fingers than for the chisel, so that the special opportunity of the modeler lies, not in the imitation of carved sculpture, but in a ready acceptance of the limitations and of the possibilities of the medium he has chosen.

For the nmateur there is no more fascinating avocation than experimenting with clay; for the art student there is no more valuable training. Modeling brings an understanding of form rendered from every point of view, deeper and more complete than drawing, where only one view is attempted. Time spent in modeling is well spent, whatever may be the ultimate aim of the artist.

MODELLING AND SCULPTURE IN THE MAKING C. G. JAOOER

The Studio Publications, Inc., New York, 1933

The volume of the How To Do It series deals in a practical elementary manner with trade and processes, each step being illustrated with excellent photographs prepared especially for this purpose. The book closes with an illuminating analysis of 12 great works of sculpture from antiquity to the present day.

TECHNIQUES OF SCILITURE

RITH GREEN HARRIS and GIROLAMO PICCOLI Harper & Brothers, New York, 1942

Here is a step-by-step expension of the processes of sculpture. The book carries the beginner from the selection of tools, materials, and models through methods of construction to the use of armatures, working in clay and directly in stone or werel, and the techniques of casting, A comprehensive, specific, and simple guide

PLASTER CASTS AND HOW THEY ARE MADE The William T. Comsteel Company, New York, 3d ed., 1927 F. F. FREDERICK

Full and explicit directions for making casts by the waste, piece, elastic, and solibor mold processes, casting from life, oiling, painting.

INDUSTRIAL ART

In medieval times the craftsman was an artist who both designed the work assigned to him and carried it to completion with his own hands. The creations of the wood carver and his fellow artisans have been objects of study and admiration through the intervening centuries. The hinges and gates designed by the blacksmith have not been surpassed and provide models for artists today. These craftsmen received their training through the guilds which offered a course of apprenticeship for a period of years. Apprentices journeyed from town to town, that they might perfect their skill and learn forcign methods of their chosen crafts. Though we know little of the life and identity of these men as individuals, we may trace the important part they played in the art and civilization of their day through the work they left behind.

America's accomplishment in the decorative arts has been appreciated only in late years. The early settlers drew their inspiration from their mother countries and copied freely contemporary English and European designs, and as a result their productions were sometimes but slight variants of Old World pieces. However, this native art possessed individuality and, on the whole, was as independent a manifestation as that of any other country. Pioneer designers and craftsmen were competent to meet almost every requirement with skill and a sure sense of stylistic propriety.

ARTS AND CRAFTS IN THE MIDDLE AGES J. DEW. ADDISON Doubleday & Company, Inc., New York, 1933

The revival of the arts-and-crafts movement in America induced the author to write of the original processes of the crafts in the Middle Ages. Brief discourses on gold and silver work, jewelry, enamels, carving in ivory, and other crafts interpret them for the American reader.

THE GOLDSMITH OF FLORENCE

KATHERINE GIRSON

The Macmillan Company, New York, 1929

The fascinating story of the lives and accomplishments of the great craftsmen from medieval times to the present day. Although mainly about Italian artists, a few Americans are included

STAINED GLASS OF THE MIDDLE AGES IN ENGLAND AND FRANCE HUGH ARROLD

The Macmillan Company, New York, 1926

 Λ popular work in which the author has chosen certain typical windows in each century and has recorded the interesting facts about them. Fifty illustrations in

EARLY AMERICAN CRAFTSMEN

W. A. DYER

D. Appleton-Century Company, Inc., New York, 1915

 Λ deep interest in the craft sometimes leads to a curiosity about the craftsman. For those who confess to this euriosity, Mr. Dyer has provided these appreciative sketches on the struggling Duncan Physe and his furniture, the patriotic Revere and his silverware, the flamboyant "Baron" Stiegel and his glassware, and others who made artistic contributions to the history of Americana.

EARLY AMERICAN TEXTILES

(Century Library of American Antiques) D. Appleton-Century Company, Inc.,

A notable addition to this series written by an Assistant Curator of Decorative Arts at the Metropolitan Museum of Art. The author has drawn upon the more unusual sources of contemporary letters and journals for her reconstruction of the early history. To her comprehensive account of the development of textiles through 200 years she adds a chapter on the more decorative and expensive

INDISTRIAL DESIGN

HAROLD VAN DOREN

McGraw-Hill Book Company, Inc., New York, 1940

This book surveys the field of industrial design elearly and fully and tells the reader who looks on it as a possible lifework how to prepare for it, how to get a

foothold, what fees to charge for his work. It begins with simplest conceptions and primitive forms, then by means of allusion and example constructs a foundation on which the reader may erect a more subtle and sophisticated design structure. It tells how to perform the techniques of each step in the design process—how to gather preliminary data, how to organize it systematically; how to make rough sketches, renderings, models, and name plates; how to present design ideas most effectively. Various phases of the work are covered, including information on materials and process, pointers on color technique, design patent information, Application is illustrated graphically, first by typical problems, for which the author demonstrates approach and methods, and then by ease histories of actual projects, which show the broader progress of design work, including contact with clients.

COMMERCIAL ART

Advertising art, the application of the power of art to commercial purposes, is not an end in itself, but is successful only when it accomplishes the purpose for which it was created, that is, the sale of goods. It must induce more people to read the copy or reinforce the appeal of its message.

Pictures, a universal language, exert a powerful influence; without them, books, magazines, and newspapers are sorely handicapped in their struggle for public favor. They are used in various ways—to attract attention, to create a favorable impression through beauty, to exhibit the product realistically, or surround it with an atmosphere of distinction, to suggest dramatically its use, or to stimulate desires which the merchandisc is expected to satisfy. For the artist who must decide which are the basic values in advertising art, to help him achieve these values and increase the selling effectiveness of his work, and to give him an insight into the reproduction processes which affect his work, the following books are recommended:

COMMERCIAL ART

C. E. WALLACE

McGraw-Hill Book Company, Inc., New York, 2d ed., 1939

This well-planned textbook presents the elementary principles of design, drawing, and lettering for the beginner in advertising art. Black-and white mediums, color, posters, and layout are discussed, and the various mechanical processes of reproduction with their advantages are clearly explained. There are problems and exercises, and the book is well illustrated.

GRAPHIC DESIGN

LEON FRIEND and JOSEPH HEFTER

McGraw-Hill Book Company, Inc., New York, 1936

Graphic design is the creative endeavor which finds expression through the medium of printing ink, including design used in the make-up of daily papers, magazines, and books, as well as in display cards and general ndvertising. In this comprehensive survey, more than 800 appropriate illustrations by leading European and American designers show current practice in lettering, printing, reproduction, photography, and poster work.

SIXTY ALPHABETS

W. B. and E. C. HUNT

The Bruce Publishing Company, Milwaukee, 1935

Lettering and type create an atmosphere or background for the advertiser's ideas and the artist must select the alphabet which best expresses these ideas. If will find very helpful the many styles, from Old English to modern Russian, reproduced here, each with a statement of its origin and correct use. In Lettering of Today (32 plates, The Bruce Publishing Company, Milwaukee, 1935) the same authors present unusual modern alphabets which show recent trends in lettering.

ADVERTISING LAYOUT

RICHARD S. CHENAULT

The Ronald Press Company, New York, 1946

A practical guide to both students and those engaged in laying out advertising in their daily work, this book explains with great clarity the basic essentials which should characterize the layout of an advertisement of any kind of article or product—whether in magazines, newspapers, posters, or direct mail. It shows the ingenious methods by which the visualizer may attain his objective in influencing the reader. The text is accompanied by 72 IuI)-page advertisements in full color and black and white, selected to illustrate the fundamental principles outlined. Three advertisements, by well-known art directors, have here been reproduced by

permission of the advertising companies and with the hearty cooperation of the advertising agencies. In consequence, the whole presentation reflects not only the long experience of a successful art director but also the views and suggestions of outstanding colleagues.

THE THEORY AND PRACTICE OF POSTER ART DUKE WELLINGTON
Signs of the Times Publishing Co., Cincinnati, 1934

The poster of the future will be instantly understandable, every line, space, and color telling its story simply and vividly, says Duke Wellington, experienced poster artist. He explains, step by step, his technique in making posters, emphasizing design, clarity, and the elimination of nonessentials, and gives excellent examples of many types of theatrical posters—velour, transparent, pastel, air brush, foreign, "aplakay," and silk screen,

PERIODICALS

Easy access to material in magazines may be obtained through The Education Index and The Art Index, both of which are available in most libraries. Magazine of Art (Monthly, The American Federation of Arts, Washington, D.C.), School Arts (Monthly, Davis Press, Inc., Worcester, Mass.), Design (Monthly, Design Publishing Co., Columbus, Ohio), Art and Craft Education (Monthly, Evans Bros., Ltd., London), and The American Artist (Monthly, Watson-Guptill Publications, Inc., New York) are expressive of instruction in fine and industrial arts. Industrial Arts and Vocational Education (Monthly, The Bruce Publishing Co., Milwaukee, Wis.), and Industrial Education Magazine (Bimonthly, Manual Arts Press, Peoria, Ill.) furnish valuable aids in this branch of the educational program. Useful teaching material dealing with art as well as various subjects in many fields may be found in the following magazines: Childhood Education (Monthly, Association for Childhood Education, Washington, D.C.), The Instructor (Monthly, The Instructor, Danville, N.Y.), and Progressive Education (Monthly, Progressive Education Association, New York).

Providing the Physical Facilities for Art Education

In designing the community of the future it is essential that the art teacher shall not neglect to plan for the immediate environment, his own school, which may well serve as the nucleus of community planning in its broader sense. In so far as the art director or supervisor is concerned, the planning should begin in the art division of the school system. With a view to providing more effectively for the needs of the classes in art, the author has, with the help of supervisors and teachers, drawn up the accompanying specifications relating to construction, color, furniture, equipment, and other items. Many of the suggestions offered for art accommodations might well be extended to include most of the rooms in school buildings used for purposes other than art. Preliminary plans, elevations, and models of the rooms described were made by boys and girls enrolled in a high school art-curriculum class in architecture. The drawings shown in the accompanying illustrations were made to scale and may be photo-

(Class at Baltumore City College, High School, Mr. Walter B. Gale, instructor.

STUDENTS OF THE HIGH SCHOOL ART-CURRICULUM CLASS IN ARCHITECTURE ENGAGED IN PLANNING NEW BUILD-ING FACILITIES FOR THE SCHOOL ART DEPARTMENT.



graphically "blown up" to any convenient size and the necessary dimensions supplied by the use of an architect's scale.

LOCATION

Art departments in new school buildings and in reconstructed old ones should preferably be on the ground floor to facilitate delivery of such materials as wood, plaster, clay, and sometimes metal and stone for use in craftwork and sculpture. Due to the display features appropriately connected with present-day art education, the rooms for carrying it on should be grouped near the main entrance of the building, all, of course, on the same floor level. Since the art department is often called upon to make scenery and properties for plays, operettas, and other such performances, it is also desirable that the rooms for art should be in close proximity to the stage of the auditorium or assembly room, if there is one in the building. Because of the desirability of uniform natural lighting, the rooms should preferably be on the north, northeast, or northwest side of the building but never on an interior court.

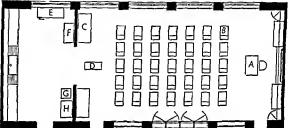
ROOMS

The following specifications for art accommodations provide for both classrooms and auxiliary rooms, these taken together constituting a complete art housing unit. In large school buildings where more than one such unit is required, the need for room accommodations may be met by constructing multiples of the unit, and if the art department be large enough, by an office for the head of the department and a supply room.

Including any number of art housing units in a standard large school building should involve no unusual modification in the plans for any building, in which an exhibition area may be formed by

placing the units opposite each other along both sides of the usual corridor, their respective display windows arranged directly opposite each other.

In a nonstandard building, however, the width of the hallway should be increased to make possible the placing of one housing unit at the end of it, the corridor thus becoming virtually a school museum,



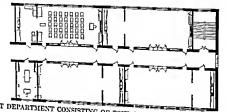
FLOOR PLAN OF ART HOUSING UNIT INCLUDING CLASS ROOM AND AUX-ILIARY ROOM, SHOWING ARRANGEMENT OF FURNITURE AND EQUIPMENT. A. Teacher's Desk; B. Individual Pupil Art Table; C. Large Worktable; D. Stereopticon Stand; E. Skopwork Bench; F. Small Worktable; G. Kiln; H. Klinserving Table.

illuminated by fluorescently lighted display windows and by similarly illuminated freestanding museum cases² centrally placed and opposite the doors and blank walls. The freestanding cases are approximately 4 by 8 feet in plan and 6 feet high, overall. Settees, instead of museum cases, are located opposite the display windows of the classrooms. These are approximately 8 feet long and consist of two benches built together, back to back.²

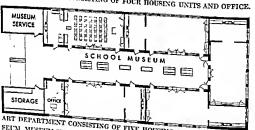
¹ The Metropolitan Museum of Art, Furniture Used by the Museum of Art, New York, 1929, p. 12, Center Case (No. 514).

² Ibid., p. 24, Gallery Bench (No. 181), with cupboard substituted for radiator screen.

The plans for a complete art department should include a department office and a room of equal size for the storage of supplies and books. In the nonstandard building the needs for bome economics,



ART DEPARTMENT CONSISTING OF FOUR HOUSING UNITS AND OFFICE.



ART DEPARTMENT CONSISTING OF FIVE HOUSING UNITS, SCHOOL MU-SEUM, MUSEUM SERVICE ROOM, OFFICE, AND STORAGE ROOM.

industrial arts, and science as well as art could be met by the superimposing of additional similarly arranged floors, and by adapting the unit to the requirements of these special curriculum fields. 354 1

LIGHTING AND ELECTRICITY

Satisfactory natural lighting should be furnished by tall windows set close together, and there should be adequate electric lighting for dark days and evenings. Opaque shades or curtains should be provided at all openings that admit daylight. Where roller shades are used there should be one wide shade for each group of windows. If it is desired that the windows shall remain closed at all times, louvers for ventilation should be provided in the construction plans of the building.

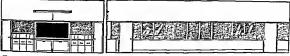
In the classroom there should be electric outlets for stereopticon and motion-picture projectors and other appliances, located at the back, near the center of the room and near the corners, respectively, as well as at the front of the room. The outlets in the auxiliary room should be for current sufficient for kiln and other appliances that require wiring beavier than standard.

CORKBOARD AND BLACKBOARD

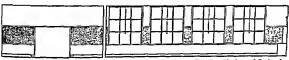
Except at the center of the front wall of the art classroom, there should be a bulletin board, of cork or of homasote board faced with cork, installed on the wall for the display of illustrative material and pupils' work. This should extend upward from the 3-foot dado to a height of 7 feet from the floor. There should be a slate blackboard of standard height, in a single piece not less than 8 feet long, located at the center of the front wall, framed to match the trim of the room, with cork board at cither side of it. An 8-foot roll-type prismatic glass-covered or dull white stereopticon screen should be installed directly above the blackboard.

CUPBOARDS

Two tall cupboards with hinged doors and equipped with eight adjustable shelves should be built against the front wall of the art



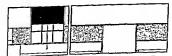
Front and Side Views of the Art Classroom Showing Blackboard, Corkboard, Stereopticon Screen, Outlets for Electricity, Built-in Furniture and Display Cases.



Back and Other Side Views of Art Classroom Showing Opaque Window Shades and Outlets for Electricity.

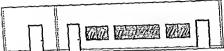


End and Back Views of Auxiliary Room Showing Corkboard, Sink, and Storage Cupboards.



Other End and Front Vieus of Auxiliary Room Showing Opaque Window Shade, Corkboard, and Outlets for Electricity.

WALL ELEVATIONS FOR ART HOUSING UNIT.



View of Art Housing Unit as Steen from the Hallway, Showing Entrance Doors and Display Cases Consisting of a Central Group of Four, Equipped with Glass Sheltes for Showing Three-dimensional Objects, Flanked by Two Groups of Two Each for Showing Flat Objects Ruch as Pictures and Posters.

classroom. There should also be at the front of the room, at either side of the blackboard, built-in cabinets each consisting of a deep table-high section of drawers and cupboards for filing illustrative material and pupils' work, and above this, two shelves with compartments for standard and oversize books. There should also be two vertical files for large pieces of illustrator's board or prints, located directly below the blackboard.

The built-in cupboards at the back of the auxiliary room should extend entirely across the back wall and should include five table-bigh sections of varying widths, and six cupboards above the table-bigh section. All the cupboards should have adjustable shelves and sliding phywood doors without paneling. The cupboard immediately below the sink, consisting of three compartments, is for crocks, pails, electric appliances, and other utensils and machines. The central compartment is without shelves while the other two have two removable shelves each. The cupboards next to the central unit have two adjustable shelves each. The two units of drawers are for large-size paper stock or drawings.

DISPLAY CASES

Fight display eases should be built into the wall that separates the classroom from the ballway. Four of these, a pair of them located near the doorways at either end of the main classroom, should be for the display of flat work and should be equipped with narrow shelves of plate glass for the display of three-dimensional objects within the classroom; the four others, centrally located, should be equipped with adjustable shelves of plate glass for showing three-dimensional objects. All the cases should be furnished with fixed plate-glass windows flush with the wall. Hinged doors of the four central display cases should be of laminated wood covered with corkboard on both sides for flat exhibits. All the cases should be illuminated with concealed fluorescent electric lamps placed high and near the front.

Displays of examples of students' work may be arranged first in the cases facing the classroom and later in those facing the hallway. Collections of art objects, prints, and books lent by the public library and art museum may be arranged in like manner, the students being given an important part in the preparation and arrangement of the exhibits shown, first in the classroom cases, and then in those to be viewed from the hall. Flat exhibits for the shallow cases, to be viewed from the hallway, can first be arranged on the corkboard display surfaces within the classroom.

THE SPECIAL ART DEPARTMENT

Although the preceding specifications will be found to apply particularly to art departments in the general school system, they should nevertheless be equally helpful in planning accommodations for the more highly specialized instruction of the technical and vocational schools and classes where courses in sign painting, related design, sculpture, painting, industrial art, commercial art, architecture, and theater art are offcred.

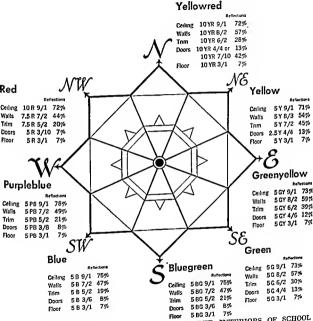
The classroom-and-auxiliary-room art housing unit embraced in

the preceding specifications, including built-in display cases and cupboards, should he found satisfactory for both general and special schools or classes. In adapting the general specifications to the special needs of vocational and technical schools and courses, special movable furniture and equipment will need to he substituted for that shown in the plans. A course in sculpture, for example, would require the substitution of modeling stands for the individual art tables represented; a course in painting, the substitution of easels for the art tables. Vocational and technical school alike should plan to have at least one complete general housing unit hefore expanding the program to include units for the specialized courses.

The housing unit described herein should, therefore, serve as the standard minimum for all schools whether general or special. Although planned specifically for elementary and secondary schools, the unit described should be found readily adaptable to the college and the university and especially to the institution engaged in the preparation of art teachers; to the art museum and public library where special facilities are needed for educational work in art; and to the hospital where occupational therapy rooms are so necessary for the rehabilitation of patients.

COLOR

That use and beauty are actually the hest of friends may he the reason why rooms in new buildings are so often structurally beautiful even before they have been either decorated or furnished. With their carefully finished floors, walls, and hulletin boards and display cases the rooms seem to symbolize the great educational purpose for which they were intended. Their usefulness, both educational and material, will be enhanced, however, by the exercise of equally good taste in their decorating and furnishing.



COLOR COMPASS FOR USE IN DECORATING THE INTERIORS OF SCHOOL BUILDINGS.

One element of design that is present in all ungarnished objects of utility is color, for color all objects must possess if they are to be visible to the human eye. No wood is so lovely in color, however, that its natural beauty may not be improved by dressings that bring out the charm of its grain, deepen its luster, enrich the glow of its hue, and dull or brighten its tints and shades. Color is also a most important consideration in the formation of products in the textile arts. It will be seen, therefore, that color in the materials of construction can scarcely be considered apart from the things themselves, except where it is added to increase their attractiveness. Thus color becomes decoration, sometimes the only decoration either present or deemed possible for the modern schoolroom.

Two systems of color study are today taught in general and special art schools and classes. One of these is hased on light, while the other is based on pigments or paints. Since color itself is reflected and absorbed light, it will at once be apparent that any system of color classification that is based on light, as is the Munsell System of color notation, must be superior to any other system of classification based on unreliable pigments. In daylight such a system will be more accurate to the extent that nature is more nearly constant than manmade pigments.

Some artists have been reluctant to accept and use the color theory based on light. They have maintained that a system that deals largely with pigments must be more practical than any other, since it employs the artist's own materials. Instruction in the mixing of paints is indeed essential in art education, and yet the recognition, harmonizing, and contrasting of the colors themselves are of more importance to the decorator than the mere production of colors, important as this may be. Most people will find the Munsell Color

System more practical than the pigment theory in solving the aesthetic color problems of daily living, since all colors are seen in light, the rays of which materials absorb and reflect. Colors will harmonize or clash with one another in and of themselves. A pigment system of color may be of some use as a measuring and harmonizing device, although it must be admitted that it is inaccurate as such; it is of unquestioned value however, in the mixing of paints, a few elementary rules for which can be learned at the outset. These should not be regarded as constituting a system of color naming, since the pigments of which they treat are in themselves variable.

It is a well-known fact that colors have a great influence over our lives in creating within us certain mental states and stimulating or depressing physical and mental activity. Red is suggestive of heat and passion; yellow of sunlight and liveliness; green of cool and quietude; blue of cold and absolute rest; purple of uneasiness, conflict. Sufficient unto the purpose of the room should be the color thereof.

Colors used in painting schoolrooms should be satisfactory from the standpoint of illumination—thus safeguarding vision—as well as aesthetically and psychologically pleasing. The accompanying "color compass" specifies the Munsell notations for hues, values, and chromas of color that may be considered appropriate in their power to reflect and diffuse light from walls, ceiling, trim, and other areas. For rooms with a north, northeast, or northwest exposure, a warm yellow-red, yellow, or red. For rooms with a south, southcast, or southwest exposure, a placid blue. For rooms with an eastern or western exposure, a neutral green-yellow or purple-blue. It is not necessary to have all four walls of a room done in the same color. Due

¹ The color compass is available in full color, size €2 by 28 inches, through the Munsell Color Company, Inc., 10 East Franklin Street, Baltimore, Md.

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³The color compass is available in full color, size 22 by 24 inches, through the Munsell Color Company, Inc., 10 East Franklin Street, Baltimore, Md.

to their irritating and exciting propensities, purple and red-purple are not recommended for extensive use in the decoration of school interiors and were therefore omitted from the color compass. The hues specified in the compass may be readily mixed or their equivalents found on the "standard color cards" furnished on request by the various manufacturers of paints.

It will be noted that, according to the diagram, the hues appropriate for the cardinal points of the compass are restricted to the following: north, yellow-red; east, green-yellow; south, blue-green; west, purple-blue. The main objective of this system being variety, without too strict a regard for orientation, it is recommended that in large buildings the colors adjacent to those for the cardinal points be used, as follows:

North—red
yellow-red
yellow
East —yellow
green-yellow
green
South—green
blue-green
blue
West —blue
purple-blue
red

In large buildings oriented according to the intermediate points of the compass this broader color application would include:

Northeast—yellow-red
yellow
green-yellow
green-yellow
green
blue-green
blue-green
blue
purple-blue
Northwest—purple-blue
red
yellow-red

Corridors and rooms with no outside exposure may be painted a very light neutral gray or a hue selected from those specified for the rooms. Vestibules, stairways, and stair halls should contrast in color with that of the corridors. Munsell notations for the colors suggested for walls, ceilings, trim, doors, and floor are given in the accompanying chart, the percentage of light reflection being indicated for all of the hues. In each case the ceiling is represented in the diagram by a large triangle, the floor by a smaller triangle, the door by a still smaller triangle, and the trim by a band.

Colors used should be neither too strong nor too dull, the amount of light and of strength being determined by the need for light in the room. Ceilings should be nearly white to reflect as much light as possible. Where a greater contrast is desired for dado, woodwork, or doors, a darker and stronger color or its complement or the lue adjacent to it in the color compass may be used to give variety. Semigloss paint should be used where light reflection is essential; flat

paint where light diffusion is desired. Floors, if covered with linoleum, should be dark—about 3 value of the dominant color of the room, not stronger than 1 step of chroma. The color compass will be found equally useful in the selection of colors, both of harmony and of contrast, for the hangings, rugs, and furnishings for the rooms.

The major advantage of these arrangements for color schemes is perhaps that they afford a maximum range of color selection, thus avoiding the monotony prevalent in school buildings where a predominating luc has been chosen for the entire building, and it makes possible a pleasing contrast between the rooms and the hallways. Adoption of the plan will make it possible for all rooms to open into hallways or other rooms of a different though agreeable color. The plan makes possible an appropriate selection of colors for all of the exposures, according to the amount of natural light available at the various points of the compass.

Obviously, no system of this kind or of any other should be followed slavishly, as there are factors other than exposure to be taken into consideration, such as overhanging roofs, neighboring buildings, trees, and other external objects that may tend to shut off or reflect or absorb much of the natural light received in the room. It is suggested that samples of the colors at least a foot square be painted first on paper or cardboard and tried on the walls before a color is finally decided on.

This all applies, of course, to natural lighting only, as artificial illumination on dark days and at night will alter the situation entirely, nor can any system for the use of color ever take the place of good taste. It may help however to improve matters where taste is lacking.

FURNITURE AND EQUIPMENT FOR GENERAL ART

Although good taste in school architecture sometimes of necessity implies standardization, it may with equal emphasis be said to demand variety; otherwise the total effect would be most unsatisfactory. The school interior should, like the interior of the home, be adapted to the needs of the occupants.

It may not be correct to assume that art education programs are good to the extent that housing, equipment, and supplies are provided to make them so; yet it is, nevertheless, true that the art instruction cannot be entirely effective without adequate provision being made for these facilities. The list of items of furniture and general equipment that follows is the same for all schools, except for the tables and chairs, which would have to be of a height appropriate to the size of the student occupants.

The following items should be sufficient for equipping one complete standard housing unit:

- 1 desk, teacher's, with top 32 by 50 inches, like those used throughout the
- 3 chairs, straight, teacher's, like those used throughout the building.
- 35 individual student art tables, subject to the following specifications: Dimensions 34 inches long, 20 inches wide, and 30 inches high. The top to be in two sections: left-hand portion 24 inches long, to be stationary and tilted at the back 15 degrees from the horizontal. Subtop to be furnished underneath the tilted top. Drawer to extend entirely across front, with bored holes instead of knobs or pulls. Material: oak and maple selected for color and finished with four coats of Duco lacquer or equivalent in a cellulose pyroxylin enamel. All the table except the top to be made of oak and finished light or natural wood. 1 worktable, with 28- by 42-inch top, for serving the kiln.

 - 1 worktable, with 24- by 48-inch top.
 - 2 worktables, with 28- by 72-inch top.

- 35 chairs, bentwood, high-back, for students.
 - 6 stools with round wooden tops, 4 legs, height overall 181/2 inches, oak, light finish.
- 1 shopwork bench, containing six drawers consisting of two groups of three each, and a vertical cupboard divided by a sliding vertical partition, with tool rack mounted on each side of it. Over-all dimensions of bench are: length 64 inches, width 24 inches, height 32 inches. Beneh to be of maple and oak, natural finish, and to be equipped with a rapid-acting woodworking vise.
 - 1 kiln, electric, with firing chamber approximately 12 by 15 by 18 inches.

BENCH EQUIPMENT

HAND TOOLS TO EQUIP SHOPWORK BENCH

- 2 bench hooks to be made of 1/2 inch stock, 43/4 hy 12 inches, maple.
- 3 bits, brace, dowel, extension lip, short: 1-1/2 inch, 1-3/8 inch, 1-1/4 inch.
- 3 hits, hrace, Forstner, short: 1-1/2 inch, 1-1/4 inch, 1 brace, bit, 8-inch sweep,
- 4 chisels, bevel-edge, pocket: 1-1/4 inch, 1-1/2 inch, 1-3/4 inch, 1-1 inch.
- 6 elamps, "C", 4-inch opening; 8-inch opening,
- 1 file, hastard, flat, 1 hy 10 inches.
- 1 file, bastard, half round, 1 hy 10 inches.
- 4 gouges, bent, outside, regular sweep, firmer tang, handle: 1-3/6 inch, 1-1/2
- 2 hammers, claw adz eye, 7 ounces, No. S.
- 6 handles, file, No. 2, for files 8 to 10 inches long.
- 1 knife, sloyd,
- 1 mallet, hardwood, 21/2 inches in diameter.
- 1 marking gauge, boxwood.
- 1 oilstone, in metal box.
- plane, smooth bottom, 2-inch cutter, Bailey, No. 4, Stanley, 9-inch overall.
- 1 phers, 8-inch button, and wire cutters. 1 pliers, 6-inch end cutting nippers,
- 4 rasps, cabinet, half round, 10 inches, 2 rules, hardwood, 21 inches,
- 2 saws, back, 10 inches,
- 6 saws, coping, wire frame for pin-pattern blades.
- 6 dozen saw blades (coping) pin pattern, dozen to package. 1 saw, crosscut, 18-inch, 9-point.
- 1 saw, rip, 22-inch, 6-point.

- 1 screw driver, 21/2-inch blade.
- 1 spokeshave, adjustable cutter.
- 1 try square, 8-incb.
- 4 bevel-point leather knives.
- 6 standard double-end leather modeling tools.
- 4 single-tube spring punches for leather with size 0 tubes.
- 1 drive nunch for leather, size No. 2.
- 1 drive punch for leather, size No. 7.
- 1 snap-button fastening outfit for leather.
- 1 eyelet spreader for leather.
- 3 standard jeweler's saw frames, 5 inches deep.
- 1 gross jeweler's saw blades, size No. 2 or No. 3.
- 6 jeweler's needle files, one each flat, balf round, round, triangular, knife, and square.
- 1 4-inch flat file.
- 1 4-inch half-round file.
- 1 hand-polishing buff.
- 1 egg-beater type drill.
- 1 dozen assorted drill points for egg-heater type drill.
- 1 scriber for plastics or metal.
- 2 8-ounce ball-peen hammers with well-polished faces.
- 1 pair metal snips, 9 inches long.

MISCELLANEOUS EQUIPMENT

- $36\,$ boards, drawing, 2 surfaces, with battens at ends, 34 by 18 by 24 inches. 2 boards, drawing, 2 surfaces, with battens at ends, 34 by 31 by 43 inches.
- 36 boards, modeling, 9 by 12 inches, Masonite, 1/4 inch thick.
 - 1 bot plate, 9 by 9 by 6 inches, with 6-inch electric heater unit, 3 heats, with reversible switch, cord, and plug.
 - 1 flatiron, electric, 6 pounds, complete with cord and plug.
- 1 yardstick, graduated in 1/8 inch with brass ends and eyelet. 2 jars, all-white, glazed earthenware, with metal covers, 10-gallon, 12-inch
 - 1 loom, braid-weave frame, with supports.
- 1 paper cutter, 18-inch blade.
- 2 baskets, wastepaper.
- 1 peneil sharpener.

- 2 rollers, printers', 6 inches long, 1/4-inch diameter, complete with handle, with miler suspended in box to protect gelatin.
- 2 class slabs, 9 by 12 inches, 1/4 inch thick, ground edges.
- 2 shears, 12-inch full length, nickel-plated blades, 816-inch cut.
- 1 set of linoleum-block cutting tools.
- 1 set of innoleum-block cutting tools.
 1 wooden linoleum-block printing press, to print up to 8- by 12-incb blocks.

VISUAL INSTRUCTION EQUIPMENT

- 1 combination projector, air-cooled with extra wire and universal plug, for standard 31/2- by 4-inch and 2- by 2-inch lantern slides, and opaque material.
- standard 3/4- by 4-inco and x- by 2-inch tancers bigh, top 18 by 42 inches, 10 drawers for filing slides, and hinged-door cupboard equipped with casters or
- small wheels.

 1 strroption screen, white-coated, 8 by 8 feet, mounted on spring roller with attachment for fastening to wall.
- I display rack, floor or desk model, or adjustable drawing board or easel.

EQUIPMENT FOR SPECIAL ART COURSES

The lists that follow are for the differentiated art-major and artcurriculum classes in the high schools and for the professional art
courses in art school and college, and do not include articles of furniture such as desks and chairs. These lists are not intended to be
exhaustive, but they will be found to meet the initial needs for the
arts enumerated. Where general art must be included along with the
assignment of a teacher to a particular art such as painting or sculpture, certain items appearing in the list will have to be supplemented
with items from the general list, such as: teacher's desk, common
chairs, individual student art tables, worktables, stools, visual and
uniscellaneous equipment. The amount of equipment will in each case
depend on the number of students to be provided for and the extent
to which the articles of general equipment are to be used. In the lists
that follow the number of items to be ordered for each classroom unit
has been indicated for a class size of 12 pupils only. If a greater num-

ber of pupils must be accommodated, the quantity of some of the items to be procured will have to be increased accordingly.

PAINTING EQUIPMENT

- 12 stools with round wooden tops, over-all height 30 inches, oak.
- 1 board, white pine, adjustable, 16 by 21 inches.

Color charts. Munsell.

- 1 hue circuit 22 hy 28 inches, mounted.
- 1 value scale, mounted. 1 chroma scale for five typical hues, mounted.
- 1 display rack, floor model, oak, 6 feet; angle of tipping for display board 3 inches from vertical at the top.
- 12 easels, imperial, height 72 inches, hardwood.
- 12 easels, folding, height 66 inches, softwood finish, for work out of doors.
- 12 plate-glass slahs, 9 hy 12 inches, 1/4 inch thick.
- 1 press, etching, with complete equipment.
- 12 sketch hoxes for oil paints. 1 waste can, metal, 12 by 18 inches, with spring cover and foot treadle.

SCULPTURE EQUIPMENT

- 12 armatures, for human figure: 7 inches high with 5- hy 7-inch base, $1 rac{1}{2}$ inches
- 12 armatures, for husts: 20 inches high (overall) with 20- by 20-inch base 2 inches
 - 6 calipers, sculptor's, outside, 18 inches long, boxwood and brass.
 - 6 crocks, 10-gallon, earthenware, with wood or metal covers.
 - 2 fire clay slabs, 1 by 10 by 10 inches.
 - 1 kiln, electric, firing chamber measurements 11 by 14 by 14 inches.
- 12 modeling stands, revolving adjustable top, three legs, hardwood.
- 24 tools, modeling, boxwood, 8-inch, ball-and-blade, assorted.
- 24 tools, modeling, double-end, wire, 8-inch, assorted.
- 12 wheels, for modeling and decorating, 6-inch head.

INDUSTRIAL ART EQUIPMENT

- 12 bench whirlers, for modeling and decorating, 8-inch head.
 - I circular saw, small, with individual motor.

- 3 color charts, Munsell, for hue, value, chroma.
- 6 crocks, 10-gallon, earthenware, with wood or metal covers.
- 1 cupboard, zinc-lined, for storage of moist claywork.
- 12 drawing sets, blackboard, wooden, consisting of one 24-inch T square, one 36-inch straightedge, one 24-inch triangle, and one 151/2-inch protractor.
 - 2 fire clay slabs, 1 by 10 by 10 inches.
 - 4 fire clay slabs, 1 by 2 by 8 inches.
 - 1 Liln, electric, chamber 11 by 14 by 14 inches.
 - 2 looms, four-hardness, small size.
 - 6 plate-glass slabs, 1/4 by 9 by 12 inches.
 - 1 Scotch-tape dispenser, streamlined, heavy.
 - 1 silk-screen unit, complete with 11- by 14-inch and 16- by 28-inch printing frame, 10-inch and 14-inch squeegee, profilm, protective cream, fiber guides, paints, varnish, solvent, stened filler, filler remover, brushes, knives, and tape.
 - 21 stilts, fire clay, 134-inch and 234-inch, 12 of each size.
 - 24 tools, modeling; boxwood, 8-mch, hall-and-blade form, assorted.
 - 24 tools, modeling: wire, 8-inch, double-end brass, assorted. 1 tool case, for woodworking and clayworking equipment.

COMMERCIAL ART EQUIPMENT

- I air brush, complete with extra needle and self-centering tip in handle, reamer, color cup, hanger and hose coupling, funnel cups, jar, bottles, and 1/2 inch air hose 12 feet long with complines.
- I air compressor for air brush,
- 2 augles, amber: 30-degree and 60-degree, 9-inch.
- 2 angles, amber: 45-degree, 8-inch.
- 5 color charts, Munsell; hue, value, chroma,
- I cutani machine, motor-driven, complete with various cutters and wire for attaching to electric outlet.
- 3 display frames, 132-inch natural molding, to take 22- by 28-inch show eards, with glass, button back, screw eyes for hanging.
- 1 display rack, floor model, oak, 6 feet, angle of tipping for display board 3 inches from vertical at the top.
- 1 Floquil Kit, complete with 1/2-ounce bottles of colored ink as follows; red, green, blue, black,
 - 6 plate glass slabs, 14 by 9 by 12 inches,
 - 1 Scotch-tape dispenser, streamlined, heavy,
 - I alk-screen unit, complete, as specified for industrial art.

ARCHITECTURE EQUIPMENT

- 12 angles, amber: 30-degree and 60-degree, 9-inch.
- 12 angles, amber: 45-degree, 8-inch.
- 1 blueprint machine, equipped with 31/2-ampere mercury vapor tubes.
- 3 color charts: hue, value, chroma, color compass.
- 1 cupboard, for drawing instruments of individual pupils.
- 1 drafting machine, "Paragon," with 12-inch and 18-inch scales.
- 1 drawing board, 42 by 72 inches.
- 12 drawing instruments, in plush-lined case.
- 1 drawing set, blackboard, wooden; consisting of one 24-inch T square, one 36-inch straightedge, one 24-inch triangle, one 151/2-inch protractor.
- 1 drawing table, 24 by 32 inches, softwood top.
- 1 drawing table, 31- by 42-inch softwood top, 113/16 inches thick.
- 2 horses, adjustable, bardwood.
- 1 light, adjustable, with fluorescent tube, for illuminating surface of large drawing table.
- 12 scales, architect's triangular.
- 1 Scotch-tape dispenser; streamlined, beavy.
- 1 shopwork bench, hardwood, with eight drawers, head and tail vises.
- 12 stools, architect's wood, with footrest, wooden top, adjustable, 27 to 31 inches.
- 12 T Squares, amber: 30-inch.
- 1 T square, amber-lined: 60-inch.
- 1 tracing table, illuminated.

THEATER ART EQUIPMENT

- 12 angles, amber: 30-degree and 60-degree, 9-inch.
- 12 angles, amher: 45-degree, 8-inch.
- 1 circular saw, small, with motor.
- 12 drawing instruments, set, in plush-lined case.
- 12 drawing tables, 24 by 32 inches, softwood top.
- 6 plate glass, 1/4 by 9 by 12 inches, ground edges.
- 1 Scotch-tape dispenser, streamlined, heavy. 1 shopwork bench, hardwood, with eight drawers, head and tail vises.
- 12 stools, wood, with footrest, nonadjustable, 30 inches, reinforced.
- 12 T squares, amber-lined, 30-inch.
- 1 waste can, standard metal, 12 by 18 inches, with spring cover and foot treadle.

OFFICE EQUIPMENT

chairs, straight, oak, teacher's, like those used throughout the building, one for each instructor in the department.

desk, teacher's, like those used throughout the building.

- I filing unit consisting of three vertical filing drawers 123% inches high, 153% inches wide, and 24 inches deep, inside dimensions; on easy-running extension slides, to accommodate picture mounts 11 inches high by 14 inches wide. One index drawer at the top with three compartments for cards 3 inches high and 5 inches wide. Constructed of quarter-sawed white oak, finished like desk and chairs.
 - 1 board, adjustable, pine, 16 by 21 inches,
 - 1 chair, swivel, with arms, oak.
 - I pencil sharpener, automatic feed.
 - 1 slide examiner, illuminated with frosted glass.
 - 1 table, oak, conference, 36 by 60 inches, finished like desk and chairs,

SUPPLIES

Quantities have not been indicated in the following list since the quantity in cacl case will be determined by local needs. The items which are deemed must necessary and which, therefore, should generally be considered first for purchasing have been marked with an asterisk.

Alcohol, denatured, in quart containers.

Atomizers, folding, small, nickel-plated

Atomizers, hand-pump type.

Boards, Academy: 12- by 18-inch, 18- by 24-inch.

Boards, bookbinder's: light gray, 25 pieces to package, size 10 by 121/2 inches.

Boards, drawing: 2 drawing surfaces, soft natural wood, 14 by 18 by 34 inches and 31 by 43 by 34 inches.

Boards, Malfa gesso: 18 by 24 inches.

Boards, modeling: 9 by 12 inches, 14 inch thick.

Boards, mounting: 22 by 28 inches, light brown, light gray, and white, embossed surface.

Bookbinder's linen, plain surface, 36 inches wide; black, blue, dark hrown, light hrown, green, red.

*Brushes, bristle: black, 12 inches overall; ½ inch flat (medium soft for dry color); 1 inch flat (for paint and enamel).

Brushes, French bristle: white, 36, 34, 1, 11/2 inches.

Brushes, good grade white hristle: 1/8, 1/4, 3/4 inches.

Brushes, camel's-hair: No. 2 round (small), No. 4 round (medium), No. 7 round (large): 1/2 inch flat, 12 inches overall (for dry colors); 1 inch (stroke), 8 inches overall.

Brushes, red sahle: No. 7.

Brushes, show-card: ½ inch, single-stroke, ox-hair.

Brushes, stencil: No. 6 round, 1/2 inch in diameter. Canvas hoards: 16 hy 20 inches, 18 hy 24 inches, 20 by 24 inches.

Canvas, cotton, No. 8 studio, stretching, heavy-weight, 42 inches wide, 6-yard rolls.

Chamois, thin, small pieces.

Charcoal.

soft, 1/4-inch diameter, hox of 25.

medium hard, 1/4-inch diameter, box of 50. Cheeseclotb, bleached, 86 inches; 32 by 28 count (for bookbinding).

Clay, flour: natural, in 5-pound box.

*Clay, modeling: in 1-pound packages (plasticene), terra cotta; gray.

*Clay, potter's: moist, 100-pound tuh or box.

*Cloth, airplane: tan, 36 inches wide.

*Cloth, hurlap: natural color, 36 inches wide, India.

*Cloth, gingham: 1/4-inch check, 32 inches wide; blue and white; pink and white.

*Cloth, monk's: natural, 36 inches wide.

*Cloth, muslin: bleached, 36 inches, 56 by 60 count.

Cloth, print: 36 inches wide, in pieces 3 to 10 yards in length, assorted colors, fast

Cloth, voile: 36 to 38 inches wide, blue, light green, pink, white, yellow.

Colors, air brush: Paasche moist water colors, 2-ounce jars; white, lampblack, sepia, vermilion, crimson lake, lemon yellow, ultramarine, sky blue, orange, Hooker green, mauve, hurnt sienna.

*Cotton, mercerized perle: 2-ounce tubes, No. 5 (medium); black, light blue, blue, light hrown, gray, green, lavender, burnt orange, orange, rose, scarlet,

Cotton, mercerized perle: 2-ounce tubes, No. 3 (large); black, blue, light blue, light brown, burnt orange, gray, green, lavender, orange, rose, scarlet, yellow.

Cotton, spool: 150-yard spools; No. 40 white, No. 50 white, No. 40 black, No. 50 Cotton, raw, batting: 1-pound package. black.

Cotton filler for rugs (roving): 4-fold, in 1-pound tubes or balls, approximately 140 yards; black, dark blue, light blue, medium brown, gray, dark green, ight green, henna, lavender, old rose, orange, purple, red, tan, white, yellow. *Crayons, blackboard; colored, 1 dozen assorted to box; 1 black, 3 white, 1 blue,

1 brown, 1 green, 1 orange, 1 purple, 1 red, 1 yellow, 1 brown.

*Crayons, pressed: eight in a plain metal box, red, yellow, green, blue, purple, orange, brown, black, about 1/16-inch diameter and 31/2 inches long.

Crayons, pressed; in bulk, about \$16 inch diameter and 31/2 inches long; black, blue, brown, burnt sienna, green, orange, purple.

Crayons, wax, pressed: in hulk, approximately 1/16-inch diameter and 41/4 inches long; black, blue, brown, green, orange, red-purple, yellow,

Dye, "Fabricolor," liquid; 1-ounce bottles; scarlet, orange, yellow, gold, brown, dark green, blue-green, blue, dark blue, purple, blue-black, jet black, rose, tan, white.

Dyc, medium for "Gypsy": 2-ounce bottle.

Erasers, approximately 136 by 1 by 36 inches, 40 pieces to the pound.

Floquil Kit, consisting of 6 Floquil, complete with nibs, 6 fillers, extra nib and plug, 6 bottles of Floquil, Dri-Ink bottle, Floquil thinner, and solvent in wooden case 636 by 9 hy 236 inches. Floquil ink refills, 2-onnee bottles; blue, green, black, red, yellow, orange, purple. Floquil ink solvent and thinner, 2-onnee bottle.

Frame, hatik: No. 1, small, 18 by 18 inches.

Frame, display: 1½-inch natural oak molding, to take mounting board exactly 14 by 22 inches, complete with glass and button back, with screw eyes and wire for hanging. Also to take mounting board exactly 22 by 28 inches.

Glue, in 12-pint cans.

Hammers, nail, adz eye, 13 ounces, size No. 2.

*Ink, drawing: waterproof, black, quart bottle.

lnk, printer's: oil, 1- by 4-inch tube; black, blue, brown, green, orange, purple, red, yellow.

Knives, stencil, 1/4- by 13/4-inch blade.

Leather, soft brown, for tooling; 7 to 9 square feet per skin.

Leather background tools: Craft Supply Co.; Nos. 14, 24, 19, single-end; Nos. 1, 2, 3, double-end.

Lindeum blocks: 5-ply, type-high, wood-mounted; 1 by 1 inch, 1 by 1½ inches, 11½ by 2 inches, 2 by 2 inches, 3 by 4 inches, 4 by 6 inches, 6 by 8 inches, 7

by 11 inches, 0 by 12 inches, 1 by 5 inches, 4 by 6 inches, 6 by 8 inches, 7 linoleum-cutting tools; hardwood handle, complete with cutter, "Speedball";

"V" veining tool No. 1; 16 inch, gouge No. 3; 1/4 inch, gouge No. 5.

Linoleum cutting-tool blades: to fit Speedball cutting-tool bandles above; "V" veining tool No. 1; 1/2 incb, gouge No. 3; 1/4 incb, gouge No. 5.

Linseed oil, refined, 21%-ounce bottle (art).

Masking tape, brown or gray paper, with adbesive backing, reusable, 1 inch by

Nails, wire, finishing, 1-pound cartons: ½-inch, No. 18; ¾-inch, No. 18; 1-inch,

No. 18; 11/4-inch, No. 16; 11/2-inch, No. 16; 2-inch, No. 14.

Napkins, paper; white, size not less than 13 by 13 inches, 1,000 to package.

*Needles, chenille: No. 5, sbarp points, 10 to paper, 13/8 inches.

Needles, raffia: No. 19, blunt, 10 to paper.

Needles, tapestry: No. 20, blunt, 10 to paper, 15% inches.

Needles, weaving: steel, blunt, 12 to the package, about 6 inches long.

Oil, household: 4-ounce can.

Oil, linseed: raw, in quart cans.

Oilcloth, table, 46 inches wide; buff, green, white.

*Paints, dry color: deep tint, in 1-pound packages; black, blue, green, orange, purple, red, white, bright yellow, brown.

Paints, enamel: 1/2-pint cans; black, blue, green, red, white, yellow.

Paints, medium-grade, lead and oil: in pint cans; blue, black, red, white, yellow.

Paints, oil colors: 1- by 4-inch tubes; black, cobalt blue, emerald green, purple, red, vermilion, violet, white, bright orange, yellow.

Paints, show-card colors: 2-ounce glass jars, screw top; brown, black, dark blue, light blue, gold, dark green, emerald green, orange, purple (magenta), purple (mauve), dark red, light red, red-orange, silver, dark yellow, light yellow,

Paints, show-card colors: pint glass jars, screw tops; black, dark blue, light blue, gold, dark green, emerald green, orange, purple (magenta), light red, redorange, dark yellow, light yellow, white.

Paints, stain (wood dye): in quart jar; dark oak, dark mahogany.

*Paints, water-color: semimoist, in pans; four colors—red, yellow, blue and black -in metal box, with No. 7 brush, full-size pan.

Paints, water-color: refills, semimoist, in bulk; half-size pan (for eight-color box), black, blue, brown, gold (pale), green, purple, red, silver, white, yellow.

Paints, water-color; refills, semimoist, in bulk, full-size pan (for four-color box),

black, blue, red, white, yellow.

Palettes, water-color, 16-well, metal.

*Pans, water-color, lacquered, 35% inches diameter, 3% inch deep.

Paper, aluminated: coated metal sheets, size 10 by 12 inches; bright gold, hright silver.

l'aper, bogus: 12 by 15 inches, 400 sheets to package.

*Paper, cover: sizes 0 by 12 inches, 12 by 18 inches, 500 sheets to package, assortment of 80 sheets each of brown, green, red, blue, orange, 50 sheets each of black and gray.

*Paper, cover: 20 by 26 inches, rough "antique" finish; black, blue, dark brown, light brown, buff; gray; green, orange; red.

Paper, crepe; in folds, 20 inches by 10 feet; black, light blue, medium blue, medium green, orange, deep pink, red, white, canary yellow.

Paper, detail: 48 inches wide, 25 yards to roll.

Paper, drawing: light-gray, semirough surface, 500 sheets to package; 9 by 12 inches, plain; 9 by 12 inches, squared ruling, 14 inch.

"l'aper, drawing: light-manila color, semirough finish, 500 sheets to package; 9 by
12 inches, 14 by 90 inches, 22 by 30 inches.

"Yaper, drawing: white, semirough surface, 500 sheets to package; 9 by 12 inches, plain; 9 by 12 inches, squared ruling 14 inch; 12 by 18 inches, plain.

*Paper, Enginex: 9 by 12 inches, 500 sheets to package; black, blue, blue-green, brown, yellow-green, orange, yellow, red, red-purple, purple, purple-blue. Assorted, 90 sheets each of red, orange, brown, green, and blue, and 50 sheets of black.

Paper, Enginex: 9 by 12 inches. Assorted, 10 sheets each of light yellow, yellow, dark yellow, gray-yellow, yellow-orange, light orange, dark orange, gray-orange; 20 sheets orange; 10 sheets each of light red-orange, red-orange; 5 sheets each of light red, dark red, gray red; 25 sheets of red; 20 sheets of red-violet; 10 sheets each of light hlue, dark blue, gray-blue; 40 sheets of blue-green; 10 sheets each of light green, green, dark green, gray-green; 40 sheets of yellow-green; 30 sheets of brown, 10 sheets each of white and gray; 60 sheets of black.

l'aper, Enginex: 20 by 26 inches; black, blue, brown, gray, neutral, green, orange, purple, red, yellow.

l'aper, label: 20 by 26 inches; gold, silver,

Paper, newsprint: plain, 500 sheets to package; 81/2 by 11 inches, 81/2 by 13 inches, 18 by 24 inches.

Paper, project: "Back-Ground," in rolls 18 inches wide, 16 yards to roll; black, dark blue, light blue, medium blue, chestnut brown, gray, green, olive green, manila, white.

Paper, project: "Textone," in rolls 18 inches wide, 16 yards to roll; dark red, middle red, dark vellow-green, turquoise blue, purple-blue, dark red-violet; dark green, dark blue-violet, yellow-orange, middle blue-green.

Paper, stencil: 9 by 12 inches, 100 shects to package.

*Paper, wrapping, kraft: 24 by 36 inches, soft fold, quire to package; 24 by 36 inches, soft fold, in quires, 480 sheets to package; 18-inch roll, 9 inches in diameter; 24-inch roll, 9 inches in diameter; 36-inch roll, 9 inches in diameter. Paper tape, gummed inside, 1 inch wide, 800 feet to roll.

*Paste, for general use: in quart jars, gallon jars.

Paste, "Sphinx": in pint cans.

Pencil sharpener: for beginner's pencils (large lead).

Pencil-sharpener knives: for "Marvel" or "Giant" pencil sharpeners.

Pencil sharpeners: for standard-size pencils.

Pencils, beginner's: large lead.

Pencils, student's: No. 2 lead.

Penholders, student's, for general use.

*Pens, lettering (Speedball type): square, large A 1; square, medium A 3; small A 5; round, large B 1; round, medium B 3; round, small B 5.

Pens, student's: for general use.

Pins, brass, 31/2-inch, 160 to paper.

Plastic wood: 1-pound cans.

Plastic wood solvent: 8-ounce cans.

Punches, conductor's, 1/4-inch round-hole, spring-handle.

Rollers, printer's, 6 inches long, 11/4 inches in diameter, complete with handle.

Rules, maple, 12-inch, plain-edge, beveled; graduations of 1/6-, 1/16-, 1/4-, 1/2-inch. Sandpaper, 9 by 11 inches, quire to package; No. 00, No. 0, No. 1/2, No. 1.

Saw, coping: wire frame for pin-pattern hlades.

Saw, fret: 8 inches deep, wood handle. Saw blades: coping, pin ends, dozen to package, 6 by 3/32 inches.

*Scissors, 5-inch over-all length, one sharp, one hlunt point. Saws, compass: 12 inches.

Screw eyes, No. 12, gross to box (3/6-inch). Screws, flat head, bright wood, gross to box; 1/2-inch, No. 4; 5/6-inch, No. 6; 3/4inch, No. 6; 34-inch, No. 8; 1½ inches, No. 8; 1½ inches, No. 12

Shellac, white, in pint hottles.

adhering liquid (silk-screen stencils) No. 22 for Nu-film, gallon container; adhering liquid (silk-screen stencils) No. 30 for Blu-film, gallon container; Silk-screen supplies:

hronze, gold, pale-gold silk-screen lining, pound package; bronzing liquid, quart container; extender, base, gallon container; film (for silk-screen stencils); Pro-film, sheet; Nu-film, sheet; Blu-film, sheet size 30 by 40 inches.

knives: chest XActo No. 82-X set (contains 3 XActo knife handles and 12 assorted blades).

knives: Paasche swivel (for stencils of film).

paints, paste, silk-screen process, quart containers: toluidine red, strontian yellow, ultramarine blue, medium green, orange, brown, purple, hlack, white. remover film (or lacquer) for silk-screen process, gallon containers.

retarding varnish for silk-screen process, gallon containers.

silk (for mending screens), 40 by 36 inches.

squeegees, for silk-screen process; 6-inch, 8-inch, 12-inch, 14-inch.

transparent base, for silk-screen, gallon containers,

Slides, projection lantern, materials for making:

radio mats, 314 by 4 inches, complete with cellophane and red carbon, 50 to box.

glass, etched, size 3/4 by 4 inches for drawing and writing.

hinding strips, 50 to package.

Snips, tin, 216-inch straight cutting edge.

Sponger, small.

Tagloard, 221/2 by 281/4 inches.

Tape, transparent cellulose Scotch, 3-inch core, 1/2- by 2,502-inch roll (perishable material).

Thumbtacks, steel, solid, 36-inch, 100 to box.

Towels, paper, flat, 150 to package.

Try squares, 8-inch blade.

Turpentine: quart containers.

Turpentine, rectified spirits of: gallon containers,

Twine, Sea Island, 11½-ounce balls; blue, brown, green, orange, red, yellow. Warp thread, 4-ply carpet warp, ½-pound tube; black, blue, hrown, ecru, green,

olive, red, white, Wax, batik, in 14-pound cakes

Wire, picture, stranded, 12 strands, No. 2 retinned, 25 feet to roll in paper box.

Wood: 14-, 15-, 15-, 116-inch basswood, in various widths. Wood: 14-inch oak, in various widths.

Wood, blocks: 3 by 3 by 5 inches long (for carving only).

Wood, dowels: hirch or maple, 3-inch lengths; 14-, 14-, 34-, 1-inch.

- Wood: soft, clear of knots, surface on two sides, pieces in 6-foot lengths; 1 inch wide by $\frac{1}{4}$ inch thick; 6 inches wide by $\frac{1}{4}$ inch, $\frac{1}{2}$ inch, and $\frac{3}{4}$ inch thick; 8 inches wide by 1/8; 3 inches wide by 1/8 inch; 5 inches wide by 1/8 inch.
- Wool, beavy rug: yarn, three-fold, 4-ounce skein; black, clear blue, dark blue, hlue-green, greenish blue, hrown, medium hrown, gray, dark green, orange, Oxford gray, purple, red, red-brown, rose, scarlet, violet, yellow, yellow-
- Wool, knitting: four-fold, 4-ounce skein, 250 to 275 yards; black, dark blue, light blue, medium blue, hrown, gray, dark green, light green, medium green, burnt orange, dark purple, light purple, dark red, light red, red-orange, tan,
- Wool, Scotch tweed: four-ply mixtures, 4-ounce hanks: 302, tan and rust; 301, white, yellow, yellow-orange. heige and brown; 303, gray, black, blue; 304, gray and black; 306, light and dark green and black; 305, gray and black.
- *Yardstick, graduated in 1/8 inches with brass ends and eyelets.

QUESTIONS FOR DISCUSSION

- 1. Where, in the school system, should planning for the school art department of the future begin?
- 2. What is the best location for an art department in a school building? The next best location?
- 3. What space should the plans for a general art department embrace?
- How should an art housing unit be lighted, naturally and artificially?
- 5. Describe the built-in display cases included in the specifications for the art
- 6. Describe the built-in storage cupboards included in the specifications.
 - 7. Discuss the layout of an art department consisting of at least five art housing units, including the rooms necessary in addition to the standard housing units.
 - 8. What colors would you recommend be used in decorating the art department mentioned in question 7?
 - How should housing units for general art be furnished and equipped?
 - 10. How should a housing unit be equipped for a course in sculpture?

REFERENCES

- Birren, Faber, Selling with Color, McGraw-Hill Book Company, Inc., New York, 1945.
- Color for America, The Glidden Company, Cleveland, 1940.
- Color Dynamics to Promote Efficiency in Schools, Pittsburgh Plate Glass Company, Pittsburgh, Pa.
- Engelhardt, N. L., Surrey Field Book for the Analysis of a High School Building, Teachers College, Columbia University, N.Y., 1931.
- Fordyce, Allmon, and others, "Home Planning Portfolio," Life, May 28, 1945.
- Graves, Maitland, The Art of Color and Design, McGraw-Hill Book Company, Inc., New York, 1941.
- Linn, H. H., "Let's Consider Color," The Nation's Schools, April, 1940.
- Munsell, A. H., A Color Notation, Munsell Color Company, Inc., Baltimore, Md., 1941.
- Plan for Tomorrow, E. H. Sheldon & Company, Muskegon, Mich., 1045.
- Schmidt, F. J., The Evaluation of An Arts Workshop, Ball State Teachers College, Muncie, Ind., 1944.
- Sloan, R. P., Hospital Color and Decoration, Physicians' Record Company, Chicago, 1944.

Appendix A

Art Appreciation Notes

PURPOSES SERVED BY ART

"To make human nature intelligible to itself," says Buermeyer, 1 "that is the real purpose of art, that, and not any construction of a sanctuary for those who find the world of practical affairs too much for them. The artist makes human nature intelligible, not, like the psychologist, by analysis of it in the abstract, but by showing imaginatively the objects and activities in which it can find satisfaction. His command of a recognized medium, paint, words, musical sound, is necessary if he is to make what he imaginatively divines common coin, but it is in the divination, the vision, that he really exercises his vocation. This, and this only, is what makes him not a purveyor of amusement but a creator of life."

Painting and sculpture enrich the lives of people by giving aesthetic pleasure; by supplying what is spiritually lacking in life through the interpretation of religion; through giving idealistic form to the representation of the commonplace; through dignifying labor; through commemorating events; and through glorifying human relationships. Painting also furnishes an outlet for artistic expression. On the material side, painting provides decorations for buildings, and is a means of livelihood for the artist.

¹ Buermeyer, Laurence, "Art and the lvory Tower," contained in Art and Education, The llarnes Foundation, Merion, Pa., 1917.

Sculpture provides embellishment for buildings and adornment for the open spaces, and it, too, furnishes an outlet for ereative expression. It also affords a means of livelihood for the seulptor.

Architecture meets both the material and the spiritual needs of man by providing a place to live; a place for worship; a place to learn; places for amusement; places for business. It beautifies the community. It provides occupation for a large number of people.

Industrial art provides a means for the gratification of the impulse to create beautiful industrial products, and to enhance the beauty of useful things. Industrial products minister to the material needs of man by lightening his labor and by adding to his comfort. Industrial art ministers also to man's spiritual needs by making beauty a factor in all useful things.

Commercial art furnishes an outlet for artistic expression through the planning and executing of advertisements requiring lettering, or illustrations and lettering; and through the planning and arranging of displays. Commercial art is a means of disseminating information by popularizing products (thus meeting an important commercial purpose); and by propagating and clarifying ideas (thus serving an important educational purpose). Commercial art objectifies and dignifies industry. It also gives aesthetic pleasure to those who will see the advertisements and displays. It provides a means of livelihood for those who possess the necessary advertising sense, taste, and skill.

A work of commercial art in the form of a painted or printed product should observe the laws of design and should be carefully finished and, if duplicated in quantity, should be accurately reproduced and carefully printed.

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ART FORM

By art form is meant the entire formation of a work of art. No matter whether a work of art be a picture, a book cover, a statue, a piece of pottery, a bridge, a building, a strip of lace, or a billboard advertisement, it must conform to the same laws of art structure, which are concerned with line, mass, and color. Line has direction, force, and character. Mass has extent, solidity, shape, and surface. Color may be either neutral or chromatic; chromatic color has hue, value, and chroma; neutral color has value, but no hue or chroma.

Design is the arrangement in a work of art; it establishes the proportion of the parts to the whole and to each other, disposes them in relation to each other, and creates a pattern. Design has rhythm or movement, and balance or equilibrium. Rhythm may be obtained by alteration, by graduation, by transition, and by progression or growth. Balance may be of unity with variety, either symmetrical or free, or of principality and subordination. The satisfactory application of the principles of design results in harmony.

Some designs are purely constructive in character, such as plans for buildings, for bridges, for machinery, and for various kinds of furniture. Other designs are pictorial, such as landscapes, portraits, and whatever is done from representation motives. There is design for a purely decorative purpose, such as sculptural decoration for buildings, patterns for textiles, or mural paintings for wall decoration.

The painter makes use of the three elements of art structure line, mass, and color; and he also employs the art principles of rbythm and balance. He obtains movement by the skillful use of color and line. He obtains balance by the proportioning, shaping, and arrangement of parts, and by neutralizing the effect of one color by

that of another. In a painting there are often examples of various kinds of rhythm and balance, such as of lines, of mass, of interests, of colors, and of intensities. A small area of vivid color balances a large area of dull color.

The architect makes use of art structure—line, mass, and color and of the design principles of rhythm and balance. Harmony in architecture depends upon proportion and on balance or the adjusting of the parts to one another. The lines of a building suggest movement or repose; they suggest strength or the overcoming of forcesupward, downward, inward, outward. Rbythm is expressed in the arrangement of columns, pilasters, and windows, and in the decorative ornamentation of huildings. Balance is expressed in the position and size of parts-gables, porticoes, windows, wings, columns, and towers.

The sculptor catches the natural rhythm of living forms and embodies it in material in such a way that the forces are counteracted by one mother and balanced in a work of art. This involves the skillful use of line, mass, and color and the careful proportioning, shaping, and arranging of parts. Natural minerals are carved and polished. Artificial stone is cast. Natural wood is carved. Bone and ivory are carved. Clay is modeled, cast, fired, and glazed. Metals are cast and engraved.

The craftsman-designer forms beautiful products by embodying the principles of rhythm and balance in his use of line, mass, and color. He selects materials which are appropriate to the processes of manufacture. For example, weaving, dyeing, and printing are important textile processes. Other important industrial processes are rolling and casting, for metals; sawing, turning, carving, and finishing for woods; blowing, casting, cutting, and etching for glass; and pugging, throwing, slip pouring, and glazing, for ceramics.

The commercial artist obtains movement in his compositions by the skillful use of line, mass, and color. He secures halance by the

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disposition of parts with reference to one another and to the whole, both in graphic work and in the formation of displays for shelves, showcases, and show windows, where objects themselves are selected and grouped to form compositions.

ART QUALITY

Quality is that characteristic of an art product which constitutes its degree of excellence as measured by design principles and the standards of taste and skill. A work of art may have intrinsic value, such as beauty, workability, and durability of material. It may also have extrinsic value, such as beauty of art form, expressed in the embodiment of the idea; its fitness to purpose, illustrative or decorative; and its technical attributes of structure and finish. In all art products beauty is dependent on both material and form as interpreted by the person who would judge their quality.

The materials used in painting have beauty in themselves. All pigments have color, either neutral or chromatic. Crayon is less difficult to work with than water color or oil color. Fresco is a difficult medium to work with because it must be applied to a wall while the new plaster is still wet. Permanence of a painting depends on its ability to hold its color and withstand deterioration. Paintings are made more permanent by glazing with a thin coat of transparent varnish. The quality of form in painting is dependent on suitability of the idea for expression in pigment; clearness and beauty of expression; composition or design; and technique, or handling of the

All building materials have color and texture which when medium. artistically disposed result in beauty. Some materials are made more beautiful by weathering. Materials vary in workability. White marble is easily worked because of its softness and the uniformity of its grain.

THE INTEGRATED SCHOOL ART PROGRAM

Granite is hard and coarse and is more difficult to work. Hard, closegrained woods are best for carving. Metals vary in respect to workability according to their malleability and hardness. The permanence of a material depends on its strength and power to withstand wear. Crystalline rock is the most permanent building stone. There are two main kinds: granite, which is composed largely of quartz, and marble, which is crystalline limestone. Concrete, which is man-made crystalline rock, ranks with natural stone as a durable building material. Brick and tile are more or less permanent, depending on the clays used and the temperature reached in firing them. Mineral ores furnish the raw material for metals such as iron and steel, copper, brass, and bronze. These metals vary in respect to durability when exposed to the weather.

In order to meet the requirements of good architecture, a building must be planned and constructed to fulfill ideas of utility and beauty. A building must fill the purpose for which it was intended. The purpose determines its size, the number and size and arrangement of rooms, the strength and durability of materials used, and the details of construction, such as the placing and size of walls, and other supports. A building must not only be adequate, it must satisfy our love of beauty if it is to be classed as architecture. Beauty is gained by the proportioning of all parts and by good arrangement of parts. Appropriate decoration and the refinement of detail sometimes add to the beauty of architecture.

All materials used in sculpture have color and texture, which determine their suitability for certain purposes. The material to be used in a work of sculpture will determine the method of handling. Limitations of material impose a definite character on the work. The sculptor composes his figure or group of figures with definite reference

to the material in which the work is to be executed. Some materials, such as stone, ivory, and wood, are appropriate for carving.

Permanency of a work of sculpture is dependent on its ability to retain its form and withstand deterioration. Bronze is a durable material, since it is affected but slightly by the weather. Marble is more easily weathered than bronze. Granite is harder and, therefore, more durable than marble. Terracotta is more or less durable, depending on the clays used, the temperature reached in firing, and the glaze, if present.

Art form in sculpture is dependent on: first, the appropriateness of the idea for sculptural expression; second, the mode of expression employed, whether realistic or symbolic; third, the clearness, force, and beauty of expression; and fourth, the design and technique shown in sbaping and finishing the material.

Both material and form determine the quality of industrial art products. Many materials used in industrial art bave an intrinsic beauty of color or texture of their own, and to many others beauty is contributed by the processes of manufacturing. The workability of industrial art materials is conditioned by hardness, malleability, ductility, and other characteristics. The durability of industrial materials is that which implies strength and power to resist wear. Quality in industrial art products also depends upon their degree of fitness to meet the purpose for which they are intended; their decorative value, considered in respect to their intended surroundings; and their beauty of construction and of finish.

For certain purposes, pencil and paper constitute the most appropriate and the most beautiful mediums of commercial art work. Quality in peneil drawing is dependent largely on the hardness, smoothness, and uniformity of the graphite used. Quality in paper is dependent on weight, thickness, compactness, surface texture, and color. Charcoal is a softer and more pliable medium than pencil and is therefore more appropriate for some kinds of work. Pen-and-ink, the most rigid of graphic mediums, is ideal for work requiring great accuracy. Where color is an important element, colored inks, water-color paints, and oil colors are appropriate. If the original drawing or design is to be reproduced, the mediums used by the commercial artist must be exactly suited to the process of reproduction. Quality of material is here conditioned by the industrial requirements of the problem. In respect to objects and other properties for display, quality consists in the beauty of things themselves and in their value as creative mediums of composition.

The permanency of a work of commercial art is not always considered as of importance. Where durability is required, materials are selected which will withstand the sun and weather. Permanency of the colors is considered in outdoor advertising generally, and in such products as posters and calendars for display indoors and which are exposed to the light for a considerable length of time.

The quality of form in commercial art products is determined by the degree to which they arrest and hold attention; appeal to the feelings, emotions, memory or imagination; create in the observer a desire for the product advertised, or sympathy for the cause espoused.

THE ART FIELD

Art has been defined as the expression of feeling in appropriate concrete form, with skill in design and technique as factors determining excellence; painting, as the art of graphic expression, in which objects seen or imagined are represented, and in which ideas and feelings are given form by laying colors on a surface. Many different

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kinds of subject have been used by artists for their pictures; people, scenes on land and water, historical events, symbolic ideas, bome life, animals, and inanimate objects. These afford subjects for pictures that may be classified as portraits, as landscapes, and as marine, historical, religious, genre, animal, and still-life paintings. Sometimes, however, these subjects overlap, and a painting concerns itself with more than one of them; animal studies form part of a landscape painting; portraits are often painted in historical and genre pictures.

Architecture is the art which seeks to harmonize in building the requirements of use and beauty. It is of the master builders and their work that we speak when we use the words architect and architecture. Early man first made use of building to provide himself a place of sbelter. As long as people lived in caves and dens of the earth, they had little need for architecture. Even for a long time after they came out to the surface to live, a tree, a tent, a wooden hut, or a straw roof supported on poles formed sufficient shelter for them. Many hundreds of years later, they began to build with brick and stone. The type of architecture that has to do with bomes is called domestic architecture. Under this heading would be included palaces and castles, hospitals and hotels, clubs and all the various kinds of houses of modern times-detached houses, semidetached houses, duplex houses, rows of houses, and apartment houses. Besides domestic architecture, other types of buildings include: religious (churches and other houses of worship); educational (schools and muscums); commercial (office buildings, stores, banks, and stations); industrial (factories and plants); and civic (government buildings).

Sculpture is modeled from such plastic materials as clay and wax. It is carved from stone, marble, and wood, and cast in plaster, and in bronze and other metals. Some sculpture is made in such a way

that the forms are attached to a solid surface of ground; it is called relief sculpture. There are several kinds of relief sculpture; cameo, or raised relief work, may be further subdivided into high relief, in which the forms project strongly from the background; has-relief, in which the forms project but slightly from the ground; and outline relief, in which only the outline of the forms projects. In intaglio, the ground projects from the sculptured form, which is hollowed out or sunken. In free-standing sculpture the object is represented in the round.

The usual subjects chosen for works of art in sculpture are: the human figure, figures of animals; men and animals; symbolic figures (centaur, harpy, griffon); and architectural and other decorative ornament.

Industrial art is the art made use of in manufacture, in which skill and creative ability are employed in the conceiving and forming of a product of utility in conformity with the principles of design. Industrial art products may be classified according to the material from which they are made. Some of these classifications are: fabric products, metal products, glass products, and ceramic products.

Commercial art is the art made use of in advertising, to popularize ideas or products, and to give aesthetic pleasure by means of lettering, nectures, and display.

The evolution of art may be divided roughly into the following periods: prehistoric, dating from the earliest times to the beginning of recorded history; ancient, up to A.D. 500; medieval, from A.D. 500 to A.D. 1300; Renaissance, from A.D. 1300 to A.D. 1600; modern, from A.D. 1600 to the present time.

PREHISTORIC ART

Painting began with man's first attempts to record in some material form his impressions of the life about him, and thus to convey

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his impressions to others. Prehistoric man painted animal forms on the walls of the caves of Perigord in the Pyrenees mountains in France. These pictures are simple and animated, each form being carefully drawn with an engraved line. Color is used, to increase realism.

Architecture began with man's first attempts to protect himself and his possessions against foes and weather. As his intelligence increased, the desire to create more effective shelter made possible the erection of better buildings to meet his social and religious needs. Man also came to desire beauty in his buildings. Architecture made gradual advancement under various peoples and at various periods, cach nation contributing toward this development.

Sculpture had its beginning in man's early desire, in the spirit of worship, to give solid form to his ideas and feelings. Sculpture has developed under various peoples during various periods of time, each making some contribution to its advancement. Throughout its development, sculpture has been closely allied with architecture.

Industrial art had its beginning with man's first attempts to make his tools, weapons, utensils, and articles of personal adornment adequate and pleasing to the eye. Industrial art has developed under various peoples during various periods, each making some contribution to its advancement. In this evolution, architecture, sculpture, painting, and industrial art have always been closely allied.

In prehistoric times, man learned to fashion implements from stone. These he strove ever to make more beautiful by refining their form and by polishing the surface. He later learned to make beautiful vessels from elay and to barden them by means of fire. These he sometimes endeavored to make still more beautiful by means of decoration. Still later, he learned to make beautiful, useful things, first from bronze and afterward from iron.

ANCIENT ART

The ancient Egyptians decorated the walls of their tombs with paintings which express a love for nature's creatures, and joy in earing for them. The Egyptians also painted portraits on their mummy cases and beautiful decorative patterns on the walls of tombs. The ancient Assyrians decorated the walls of their palaces with paintings which often express cruelty and pain. They made great advance over the Egyptians, however, in the representation of animals in action.

The Egyptians gave us the lintel as an architectural element. They developed a style characterized by majesty, solidity, durability, and colossal size. They also contributed an appropriate system of decoration. In Egypt there are remarkable ruins of temples at Edfou, at Karnak, at Abydos, and at Thebes. From these ruins we can learn the general arrangement of the Egyptian temple, consisting of an exterior high surrounding wall; a gateway or pylon of massive proportions; a series of courts for priests and worshippers; and roofed anartments for the images of the gods, residence of the priests, and preservation of offerings. Solidity and durability were ideals that the Ecvotians built into their temples. The temple apartments were roofed with lunge horizontal blocks of stone, supported by stone beams resting on vertical columns, also of stone. The strong curving cornices of Egyptian buildings accent the massive heaviness of effect in the buildings by the dark shadows they east on the walls. The Egyptian columns have the same elements that are later found in the Greek columns-base, shaft, capital, and abacus. The columns of the rockcut tombs at Beni-Hassan, erected earlier than 2500 B.C., are famous for their resemblance to the Greek Doric columns, the oldest of which, still standing, is more than 1,400 years later. Another early type of Egyptian column and capital represents a bunch of lotus buds and stems bound together. Later Egyptian capitals include forms resembling the open lotus flower and the closed lotus bud. The entire wall, roof, beam, and column surface of the temples were often covered with carved inscriptions and decorative pictorial designs, all done in brilliant color. Stucco of a very durable quality was sometimes laid on the stone surface and received the coloring.

The people of Chaldea and Assyria built temples of brick. These buildings took the form of stepped pyramids. The Chaldeans and Assyrians also developed a system of decoration which was used extensively in their glazed-tile wall coverings.

As an outgrowth of the religious impulse, and in order to record and preserve for all time the essential characteristics of individuals, animals, plants, and other things, the Egyptians developed a formula for sculptural representation which attained simplicity, dignity, and force.

The people of Assyria and Babylonia excelled the Egyptians in the naturalistic representation of animals in sculpture. Their basreliefs, sometimes showing scenes of extreme cruelty and suffering, were often inspired by the life and exploits of the king.

The ancient Egyptians made beautiful articles of furniture, jewelry, and fine linen. The people of Chaldea and Assyria excelled in the making of brick and glazed terra cotta. The ancient Phoenicians were the earliest people to make beautiful glass. The Greeks produced articles of pottery, of perfect proportion and with appropriate painted decoration. They also produced a great variety of beautiful metal products. The Greeks decorated the walls of their public buildings with paintings which were hotb decorative and realistic. They also employed painting in decorating their vases and sculpture.

The most important Greek temple ruins are those at Athens which belong to the fifth century B.c. There are foundations and fragments of other Greek temples at Corinth, Delphi, Olympia, and Ephesus, and in Sicily, Italy, Asia, and Egypt, dating back to the sixth century n.c. The absence of temples of a date earlier than the sixth century is probably due to the fact that they were built wholly or in part of wood. The most striking feature of a Greek temple is the exterior portico, whose colonnade, surrounding a wall without windows, supports above its double line of beams a gabled roof. The Greek temple was essentially a shrine huilt to house a statue of a god. llence, unlike the Egyptian temple of many rooms and courts, it had but a single main apartment, to which was generally added another smaller chamber used as a treasury for holding the government funds or for the more valuable offerings made to the god. An interior colonnade of two stories of columns, placed one above the other, supported the roof and divided the apartment of the statue of the god into a middle chamber and two side aisles. The roof was probably formed of wooden beams covered with stone or terra-cotta slabs. None of these roofs has been preserved, so that the method of lighting the buildings is not definitely known.

Distinguishing features of Greek architecture include fine proportion, symmetry, grace, and repose. The Greeks contributed the three classical orders of architecture, known as Dorie, Ionie, and Corinthian, which are characterized, respectively, by simplicity, elegance, and huxury. The system of decoration developed by the Greeks was both graceful and refined.

The best known and the simplest of the orders is the Doric. It is short and sturdy, tapering slightly toward the top, and with a slight swelling in the middle. The vertical grooves channeling it are known as flutings. The capital is very simple, consisting of two parts, a sloping one below, called the echinus, and a square slab above it, known as the abacus.

The Ionic column is slender and gracefully fluted, and has a base. The capital is the distinguishing feature. It has scroll forms, like curls or rams' horns, called volutes. The Ionic order originated in Asia Minor, where there were Greek colonies, and while Ionic temples were built in Athens and in other places on the mainland, most of the examples are to be found in Asia Minor.

The third order, the Corinthian, is the most claborate of the three. It has a base and flutings like the Ionic, but the capital consists of two parts, an inverted bell overlaid by two rows of alternating acanthus leaves, with paired scrolls or volutes supporting the corners of the abacus, and a square, flat slab above. The pediment, or gable, in Greek architecture is distinguished by its ohtuse angle. The space within the lines of the gable was adorned with sculpture, and ornaments were placed on the summit of the pediment and in the lower angles at each side.

The Romans inherited the arch and the vault from their predecessors, the Etruscans, and the entablature and columns from the Greeks. In most of their important buildings these were combined. The arched construction made possible vast, unincumbered interiors and huildings of imposing appearance for civic as well as for religious purposes. The Romans often used the Greek orders of architecture for purposes of pure decoration, rather than for decorative construction.

Few new features of architecture were created by the Romans, but they excelled in bringing together and developing the already existing features, and are noted especially for their use of the arch, the vault, and the dome. The Romans preferred the Corinthian order and combined it with the Ionic to form what is known as the composite order. They also invented the Tuscan order, which is an Etruscan modification of the Doric. Ancient inscriptions show that the earliest Roman temples had a marked resemblance to those of the Greeks, without the beauty or refinement of proportion of the latter, however. The Roman temples of the imperial period are Greek both in plan and in their details. Many of them abandom the surrounding colonnade, keeping only the front portico. The Romans used much brick and concrete for building purposes, and often faced these materials with marble.

Spiritual and physical values were equally esteemed by the Greeks, whose best sculpture is characterized by simplicity, repose, and grace. The finest examples of the representation of the human farm by the ancient Greeks show a perfect balance between mind and body. The sculptured figures are typical or general, rather than individual likenesses.

Although the Roman sculptor was influenced somewhat hy the Greek masters, he was a realist at heart, whether he chose to produce a piece of architectural decoration or a sculptured portrait.

Walls in Herculaneum and Pompeii in Italy, which were buried by the disastrous cruption of the volcano Mount Vesuvius, in A.D. 59, still display notices painted in black and red, of plays, gladiatorial combats, and baths. Roman booksellers of the time placarded their shops or stalls with signs of stone or of terra cotta, in relief. In such signs symbolism played an important part—the goat symbolizing

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the milk seller; the vine, the wine merchant; the anchor, the ship chandler

MEDIEVAL ART

The early Christians of Byzantium, or Constantinople (now Istanbul), who lived during medieval times, employed gold and marble and brilliantly colored glass in decorative mosaic pictures which symbolized, on walls and the interiors of domes, the tenets of Cbristian faith. Western Christians of about the same period of medieval times illustrated their books with water-color paintings of marked artistic quality. They later employed painting effectively in stained-glass windows. In both these types of medieval painting the influence of mosaic art is evident, the result being flat and decorative. Symbolism was a chief motive of this work. The early Western Christians employed fresco painting in decorating the vast spaces of their thickwalled church buildings. Although nature exerted an ever-increasing influence over their work, good design was also an important aim. Most of the subjects were either historical or allegorical in character. Realism began to appear, along with the growing preference for secular subjects. Expression was here sometimes more important as an aim than beauty in composition.

Early Christian architecture in the West was characterized by thin brick walls, wooden ceilings, long colonnaded interiors, with rieb mosaic and marble ornamentation. In the East, it was characterized by large interiors, round arched openings, and domes. Romanesque architecture continued to make usc of the round arch. The Saracens were the first to use the pointed arch.

With the triumph of Christianity under the Roman emperor, Constantine, there arose a new need for architecture. It now became necessary to provide temples for the newly accepted religion, which up to this time had heen carried on in private houses or the dark chambers of the catacombs. The old temples could not be taken over by the Christians, since their associations were offensive to Christian ideas, and, besides, the old temples were too small and were hadly lighted for the Christian form of worship. It was necessary to have a place for a large group of people to assemble, and for the celebration of elaborate and magnificent rites.

The Roman basilica, intended for large assemblies, such as courts of justice, seemed best suited for the purpose. The typical basilica was a rectangular building, divided by two rows of columns into a nave or central portion and aisles, with the nave rising higher than the aisles and forming a clerestory pierced with windows. The apse, a semicircular termination to the nave, became the sanctuary containing the altar, and sometimes there was a transept, or cross aisle, separating this apse from the main body of the building. The great churches of Constantine showed practically no divergence from the established basilica type; they were larger, of course, but their plan and general form were the same. In decoration they were sumptuous, with long ranks of columns of precious marble, often taken from the pagan temples, wall coverings of alabaster and other stones, and mosaics of the richest sort.

When Constantine moved the capital of the Roman Empire to Constantinople, there developed still another style of church architecture, known as the Byzantine, from the early name of Constantinople, Byzantinm Because of the situation of Constantinople, in touch with both Greece and the Orient, this new and luxuriant style combined the influence of Greek art in its carved details, and a superb use of color inspired by Asia, with the traditions of the

Roman use of the arch and vault and of rich marhles. Byzantine architecture employed many domes—a central dome surmounting a square space and surrounded by many smaller domes and semi-domes. The Byzantine dome differs from the Roman in being not a perfect hemisphere, but slightly flattened at the top. This new type of architecture was carried over the entire Roman world, and even to Rome itself, but the Western peoples still preferred the basilica type. Most of the early Christian architecture of Europe followed the latter style and that of the baptistery, which was derived from the old Roman domed baths.

Making use of these Roman forms of building, there flourished for many hundreds of years in Europe a style of church architecture known as Romanesque, adding to the Roman pier and arch characteristics peculiar to the part of the country where it was used, and showing the influence of the Northern people, the Barbarians, who during the Middle Ages swept down over the land. This influence is shown chiefly by a rude decoration, quaint but effective; by grotesque sculptures; and by towers. In different parts of the country the Romanesque style was known by various names—in Italy, as Tuscan or Lombard; in France, as Romano; in Germany, as Rheuish; in England and Scotland, as Norman.

By the twelfth century, another style of architecture called Gothic began to spread over Europe. During the Crusades, Europeans had become acquainted with the pointed arch, as used by the Arabs and Saracens in the airy, fragile, sometimes flimsy buildings which they constructed. The Gothic builders found that by use of the pointed arch in their plain and severe clumbers they could not only give greater stability to the vanlting, but they could perforate the great thick walls with arches until it was possible eventually to do away

with most of the walls. By building a series of piers to support arches and vaults and roof, they were able to fill in the entire space between the piers with windows. These windows were filled with lovely stained glass, set in a tracery of geometric forms. On the exterior, the walls were strengthened by buttresses built against the piers. The upper walls of the nave were reinforced by flying buttresses, rising high above the aisles. Pinnacles surmounting the buttresses increased their weight and resistance, and emphasized their purpose and importance.

The early Christians of the West made no outstanding contribution to the development of sculpture. What little was done by them took the form of relief carving, for the idea of sculpture in the round was repugnant to them because the idea in the heathen temples were statues. The Byzantine, or Eastern, Christians, however, contributed a geometric system of ornament and a splendid technique, which manifested itself in has-reliefs in ivory, gold, and silver.

Italian monks during the Middle Ages carried on the tradition of Roman and Byzantine sculpture in the Romanesque style of basrelief decoration which was often majestic and powerful, though abstract. The Romanesque style is never realistic.

Gothic, like Romanesque sculpture, was entirely under the influence of the church. The imagers were lay sculptors, who revived the realism of Roman sculpture and developed it still further in their decoration, which for the most part took the form of has-relief. In portraiture, the realism approached naturalism, or the rendering of individual expression. Gothic sculptors, unlike the sculptors of ancient Greece, draped their figures. The quality of screnity is present in the best Gothic, as well as in the best Greek, sculpture. The purpose of Gothic sculpture was, however, to teach rather than to please.

It was during this period that the Mayas of Central America were producing their finest sculpture in stone.

During the Middle Ages the Christian monks, in both the East and the West, made illuminated manuscripts, and book bindings in which gold and silver and precious stones were sometimes used. They also fashioned beautiful, useful objects from silver and gold. Most of these served a religious purpose.

In medieval times there was scarcely a huilding of any importance without its sign. Family coats-of-arms hung in front of the houses of the nobility. Red lions, green dragons, star and garter, and other symhols served to name the taverns. Reading was then an accomplishment shared only by the few. Names were often symbolized in rehus form; a hare and a hottle were used together to form the owner's name of Harehottle. Thus, those who could not read words were able to read the signs, which were generally painted on wood or metal.

RENAISSANCE ART

The Renaissance movement in painting took deepest root in Italy, where individualism prevailed and painters strove to interpret rather than to represent nature realistically. The Italians employed color most successfully. Since the time of the Renaissance, oil pigment has become the characteristic medium of the painter. It was first employed successfully in Paris and in Flanders; somewhat later, in

In Italy building was least affected by the Gothic style of architecture, Italians adhering to the low proportions and solid walls of the Romanesque period. During the fiftcenth century, there began in Italy a period of revived interest in the learning and art of the past, known as the Renaissance. The Renaissance style in architecture made use of the Roman types of building and ornamented them with Greek forms, which were destined to become decorative rather than structural. Columns, entablatures, and even pediments were now applied to the surfaces of buildings, for ornamental purposes only. The Renaissance style rapidly spread over Europe and, in the sixteenth century, supplanted the Gothic style. Its influence is still felt in the architecture of today.

In Gothic architecture strain was concentrated on piers and halanced by huttresses. Walls were considered as less important than windows. Gothic architecture is characterized by ribbed vaulting, pointed arches, vertical lines, vastness, complexity, aspiration, and mystery. Renaissance architecture revised and adapted the styles of former times, especially those of Greece and Rome.

Renaissance sculpture was a logical outgrowth of the Gothic style, for it brought together the forms of antiquity and those of the Middle Ages. Sculptors of the Renaissance succeeded in creating new forms that were characterized by realism and by a firmness of line which gives their best work the semblance of life. The quality of serenity, always present in Greek sculpture, is replaced in the sculpture of the Renaissance by uneasiness, the conflict between mind and body.

The Renaissance movement in sculpture was followed by a return to classic simplicity and severity in the illustration of mythological subjects, which were made for the enjoyment of a comparatively few wealthy patrons. Then followed a democratic purpose of representing men distinguished in literature, art, and statesmanship, and patriotic, religious, and social themes generally.

APPENDIX A

During the Renaissance, skill seems finally to have triumphed over taste. The best examples of this period are intimately associated with the adornment of churches and other buildings, as adjuncts of architecture. Small objects at this time were generally either neglected or overornamented.

With the extended use of printing and the invention of movable type by Gutenberg, advertising as we know it today had its actual beginning. A book announcement appeared in Germany as early as the sixteenth century.

MODERN ART

The great schools of painting which arose in Italy, Flanders, Holland, Spain, France, and elsewhere have long since ceased to exist, while the art of painting has become more and more united in its aim to express feeling by recording an impression of a mood or a state of mind. Set rules for representing objects have given way to the careful observation and sometimes even scientific study of appearance and the representation of things as they are actually seen "in the open air" and in relation to their surroundings. The story-telling object has been largely supplanted by a desire to create pictures which shall have both aesthetic and emotional appeal, but which need not illustrate a particular scene or event.

Following the Renaissance, various combinations of the old styles of architecture were used throughout Europe. The Gothic arch and spire arc common to churches erected before 1890. Since then, the tendency has been toward the low dome and the tower without a spire. More attention has been given to the combining of utility and beauty in public and private buildings.

In America, there has heen an interesting and rather complete evolution of architecture in modern times. This has included the following structural forms: the log cahin; early colonial house; cottage; bungalow; modern "colonial" house; adaptations of Italian, French, and English houses; apartment; office huilding, including the skyscraper; and public edifices, including school huildings. Steel construction and reinforced concrete have made possible the development of new types that are truly American in expression and in their art form. We are now living in the period of functional architecture.

The earliest American sculpture was inspired both in theme and in form by works of the Italian classicists, whose mythological and romantic subjects were later superseded by Biblical and genre themes. During the last half century the influence of Paris has heen most potent. In spite of these influences, the spirit of American sculpture is today quite distinctly American. Europe has inspired, rather than dominated, American sculpture. The present tendency in sculpture is to create statues and architectural ornament which shall, above all, have aesthetic appeal, but which need not necessarily illustrate a particular object or event.

Since about 1800, industrial art has flourished, especially in France, Germany, Italy, and England. Germany is noted for toys; Italy, for fine glass; England, for chinaware. The earliest industrial art practiced by the colonists in America was characterized by the classic simplicity so well expressed in nur colonial architecture. Since the industrial revolution, which began about 1800, the United States has developed beyond other countries the mass-production method of manufacture and is now more nr less successfully competing with foreign countries in the production of china, glass, textiles, costumes, jewelry, furniture, and machines, especially automobiles and airplanes. 1 40G]

APPENDIX A

The first advertisement in an American newspaper appeared in the Boston Newsletter of 1704. The earliest American advertisements were for the most part brief notices of goods imported from England and offered for sale—coffee, slaves, and cattle. The evolution of advertising has paralleled the evolution of newspapers. It is interesting to note in this connection that the first American posters were made to advertise the circus and the stage.

Commercial art is of great social and educational value today, for it keeps the public in constant touch with the invention of new things and with improvements of existing industrial products. It also keeps us all informed regarding social welfare, and the cost and qualities of commodities. It is helping to make possible a unified, larger, and more economic social order.

Verbs and Phrases Used in Preparing Written Lesson Plans

(Grouped according to educational implications)

	(Grouped according t	o educational implicat	ions)
aim aspire attempt endeavor reach toward 2 appreciate compare contemplate eriteize enjoy evaluate examine expose to identify interpret judge observe ract to understand view	ask demand lave do inquire invite make inquiry press propose request require suggest urge	find hold responsible for learn about locate make an assignment make responsible for set a problem 5 accomplish arrive at attain attend to bring about carry out complete cover finish fulfill gain 408]	master obtain perfect reach realize satisfy saturate solve work out G approach begin come prepared commence enter upon initiate introduce open originate plan precede start

APPENDIX B

	124 -		
7 adapt alter change	remind repeat review simplify	insist repeat stress	explore manipulate play with try 18
contrast make different make flexible modify qualify vary 8 check check up correct evaluate	base caution comply confine conform with control govern kill limit	appeal to approve arouse interest assure commend compliment credit encourage foster influence inspire keep alive popularize praise	build cast combine construct copy cut form have made letter make model mould
examine follow up measure question rectify test 9 analyze cboose match pick out select separate	alternate arrange balance beautify compose decorate design paint plan sketch 13 consider debate discuss	recall to mind release renew reward stimulate vitalize 16 experience feel handle hear listen to see	outline paint shape trace write 19 agree decide define determine discover generalize list summarize tabulate
answer clarify clear up explain	talk about 14 emphasize impress on	watch 17 adventure experiment [409]	20 bestow devote

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give	incorporate	manage	let
grant	involve	prepare	
make available		see to it	permit
offer	21	surprise	31
present		amprise	
send	accumulate	27	call attention to
spend (time)	acquire	look at	direct attention
	add	note	point out
21	advance	notice	point to
associate	apply		
bring together	collect	observe	32
combine	develop	See View	continue
connect	cnlarge	view	extend
correlate	enrich	28 '	go ahead with
designate	gain	-	go on with
form groups	gather	avoid	move about
group	increase	discard	Proceed
harmonize	multiply	eliminate	
integrate	raise (standards)	leave out	pursue .
join	25	neglect	33
mix	23	omit	
	conserve	29	benefit by
6 5	economize		create
aid	hold	confer	cultivate
aid assist	keep	confide	form
	Preserve	consult	formulate
equip facilitate	protect	contribute	make
raciiitate guide	save	cooperate divide	produce
help	26	divide	take advantage of
remedy	26	meet halfway mingle	
suggest	appoint	Participate	34
	arrange for	share	awaken
23	carry on	socialize	bring back
	conduct	tolerate	restore
embody	employ	are	revive
embrace	have on hand	30	-
include	make arrange-	-C -	35
	ments for	afford opportunity	amplify
		=110.M	apply

APPENDIX B

		LL I IMIDIAL D	
broaden circulate (prints) demonstrate display dramatize elaborate exhibit bang up illustrate imitate improve interest manifest picture place (materials) play pose remind review show supplement	afford distribute furnisb pass pass out provide supply 38 adjust assemble classify grade name number organize put in order systematize 39 accept	characterize convey the idea convince describe enlighten express familiarize get across give to understand impress on indicate instill instruct intimate lead put over represent specify teach 41 allude to communicate	concentrate attention upon consider focus attention on imagine pay attention to suppose think visualize 43 accustom commit to memory drill exercise fix in mind memorize practice train
become acquainted with find out investigate know learn look for look up read about search for study	adopt assume capture get obtain procure receive secure take 40 acquaint	report revcal state tell	employ make use of use utilize 45 attend conduct go to see take on tour ake on visit
aurvey	advise		

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